

Table of Contents

RF Inductors

Surface Mount

Series 100	2
Series 103	3
Series 105	4
Series 106	5
Series 108	4
Series 160	6
Series 0402	10
Series 0603	11
Series 0805	12
Series 1008	13
Series HF1008	14
Series WW1008	15
Series S1008	16
Series 1210	18-19
Series S1210	17
Series 1330	27
Series MIL1330	28
Series 1331	29
Series MIL1331	30
Series C1608	39
Series 1812	22-23
Series MIL1812	24
Series S1812	25
Series MILS1812	26
Series C2012	39
Series 2510	31
Series MIL2510	32
Series 3090	7
Series 3094	8
Series 3223	33
Series 4232	21
Series 4302	20
Series 4379	9
Series 4426	37
Series 4494	40
Series S4924	34
Series 5022	35-36
Series 5526	38

Thru-hole

Series 511	46
Series 0819	40
Series 0925	53
Series 1025	42
Series 1026	42
Series 1537	44
Series 1638	45
Series 1641	54
Series 1782	43
Series 1840	47
Series 1944	48
Series 1945	48
Series 2150	49
Series 2500	50
Series 2890	51
Series 4307	55
Series 4470	52
Series ER	56-59

Radial Leaded

Series 2020	60
Series 2534	63
Series 2727	61
Series 4445	62
Series 4554	64
Series 4564	64
Series 4669	65
Series 9405	66
Series 9406	66

Power Inductors

Surface Mount

Series P1330	68
Series P1812	67
Series 2512	69
Series 3483	70
Series S3483	70
Series SDS130	71
Series SDS680	72
Series SDS850	73
Series 4501	74
Series 4448	75
Series CMT4545	76
Series 4922	77
Series 5142	78
Series 8532	79
Series HCT	80-81
Series FW1405	82
Series LLST	88
Series PD	83-84
Series PTHF-SM & Series PTKM-SM	89-90
Series SPD62	85
Series SPD73 & Series SPD74	86
Series SPD125 & Series SPD127	87

Thru-hole

Series 2256	91
Series 2474	92
Series 4590	93
Series SPST	94

Radial Leaded

Series 3443	95
Series DC630	97
Series DC780	98
Series HC	96
Series PT	99-102
Series PTHF & Series PTKM	103-104
Series PTHF-VM & Series PTKM-VM	105-106

EMI/RFI Suppressors

Surface Mount

Series EMI	107
Series 4221	108
Series 4222	109
Series 8454	110
Series SMB 2.5	111

Thru-hole

Series 4211	112
Series 4212	113
Series 4214	114
Series 9565	115

Cable

Series BF	116-118
Series CF	119-120
Series CSP	121
Series RPC/RPU	122

API Materials

	123
--	-----

Absorbers

Series FFAM	125-126
Series FFAT	124

CONTACT API DELEVAN FOR THE FOLLOWING:

Inductors –

Series 0920
Series 1027
Series 1325
Series 1537-7XX
Series 1539
Series 1842
Series 2502
Series 2892
Series 3500
Series M0820
Series M1330
Series M1331

Suppressors –

Series 7085/7273
Series FTA
Series PA

Transformers

Common Mode Surface Mount

Series CM6296	127
Series CM6149	128
Series CM6350	129
Series CM6460	130
Series CM6560	131
Series CM6594	132

Thru-hole

Series CM1011	133
Series CM7560	134
Series CM9900	135

Switch Mode - EE Core

Series 6655-6658	136
------------------	-----

Switch Mode - ETD Core

Series 6665-6668	137
------------------	-----

Laminated - PC Mount

Series 6012 - 6027	138
Series 6051 - 6055	139
Series 6443 - 6448	140

Laminated - Quick-Connect

Series 6494 - 6498	141
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Specialty Products

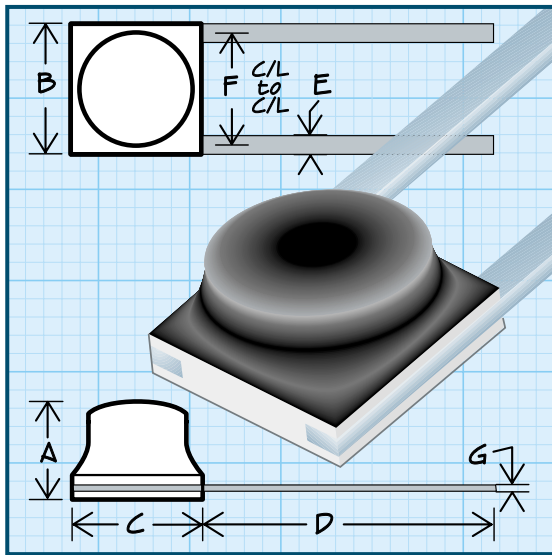
Custom Air Cores	142
Custom Ferrite Cores	143
Other Custom Products	

Technical & Appendix

Glossary	144-145
SMT Technical Notes	146-147
Thru-Hole Technical Notes	148-150
Mil Standard to Delevan Conversion Chart	151-156
SMT Suggested Land Patterns	157
Component Surface Finish	158-160
Prototyping Kits	161

Micro i® Ribbon-Lead Inductors

RF INDUCTORS



Military Specifications MS21367 (LT10K)

Physical Parameters

	Inches	Millimeters
A	0.065 Max.	1.65 Max.
B	0.100 ± 0.010	2.54 ± 0.254
C	0.100 ± 0.010	2.54 ± 0.254
D	0.210 Min.	5.33 Min.
E	0.012 ± 0.002 (Typ.)	0.30 ± 0.05
F	0.095 ± 0.015	2.41 ± 0.381
G	0.002 +0.001-0.000	0.05 +0.025-0.000

Weight Max. (Grams) 0.03

Current Rating at 90°C Ambient 15°C Rise

Operating Temperature Range -55°C to +105°C

Maximum Power Dissipation at 90°C 0.0205 Watts

Notes 1) L, Q and SRF measured on Boonton Q and RX meters using special test fixtures. Details for fixtures available. 2) Part number and quantity will appear on package as units are too small for legible marking.

Core Material Iron (LT10K)

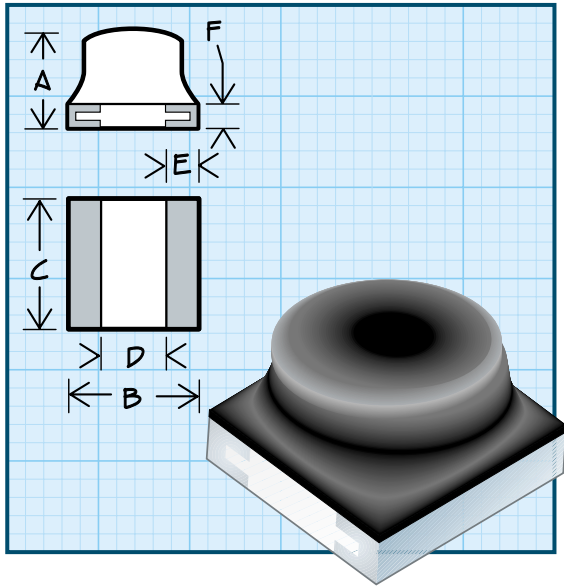
Mechanical Configuration 1) Units are epoxy encapsulated. 2) Leads are tin/lead plated Beryllium Copper 3) Gold Plated leads available on special order. 4) RoHS compliant part available by ordering 100R Series.

Packaging Bulk only

Made In the U.S.A. Patent Protected

	DASH NUMBER*	MIL DASH #	INDUCTANCE (µH)	TOLERANCE	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAX. (mA)
M21367- SERIES 100 IRON CORE (LT10K)									
-150N	01	0.015	±30%	40	50.0	250	0.065	492	
-220N	02	0.022	±30%	40	50.0	250	0.090	418	
-330N	03	0.033	±30%	40	50.0	250	0.115	370	
-470N	04	0.047	±30%	40	50.0	250	0.120	360	
-680N	05	0.068	±30%	40	50.0	250	0.150	324	
-101N	06	0.100	±30%	40	50.0	250	0.170	304	
-121M	07	0.12	±20%	35	25.0	250	0.140	335	
-151M	08	0.15	±20%	40	25.0	250	0.160	313	
-181M	09	0.18	±20%	40	25.0	250	0.190	287	
-221M	10	0.22	±20%	40	25.0	250	0.21	274	
-271M	11	0.27	±20%	40	25.0	250	0.24	256	
-331M	12	0.33	±20%	40	25.0	250	0.25	251	
-391M	13	0.39	±20%	40	25.0	200	0.28	237	
-471M	14	0.47	±20%	40	25.0	175	0.31	225	
-561M	15	0.56	±20%	40	25.0	170	0.45	185	
-681M	16	0.68	±20%	40	25.0	165	0.62	159	
-821M	17	0.82	±20%	35	25.0	160	0.65	155	
-102M	18	1.00	±20%	35	25.0	135	0.73	145	
-122K	19	1.20	±10%	35	7.9	120	1.00	125	
-152K	20	1.50	±10%	32	7.9	110	1.20	114	
-182K	21	1.80	±10%	32	7.9	95	1.50	102	
-222K	22	2.20	±10%	35	7.9	80	1.70	96	
-272K	23	2.70	±10%	35	7.9	70	2.00	89	
-332K	24	3.30	±10%	37	7.9	65	2.20	84	
-392K	25	3.90	±10%	37	7.9	60	2.80	75	
-472K	26	4.70	±10%	40	7.9	55	3.10	71	
-562K	27	5.60	±10%	40	7.9	50	3.30	69	
-682K	28	6.80	±10%	40	7.9	45	3.80	64	
-822K	29	8.20	±10%	40	7.9	43	5.00	56	
-103K	30	10.0	±10%	40	7.9	40	5.60	53	
Parts listed above are QPL/MIL qualified									
Optional Tolerances: J = 5% H = 3% G = 2% F = 1%									
*Complete part # must include series # PLUS the dash #									
For further surface finish information, refer to TECHNICAL section of this catalog.									

Micro i[®] Chip Inductors



Military Specifications MIL-PRF-83446/04

Physical Parameters

	Inches	Millimeters
A	0.075 Max.	1.91 Max.
B	0.100 ± 0.010	2.54 ± 0.25
C	0.100 ± 0.010	2.54 ± 0.25
D	0.050 Min.	1.27 Min.
E	0.015 Min. (Typ.)	0.38 Min. (Typ.)
F	0.020 Max. (Typ.)	0.51 Max. (Typ.)

Weight Max. (Grams) 0.03

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature Range -55°C to +125°C

Maximum Power Dissipation at 90°C 0.135 Watts

Termination Finish Options (Part # Code)

- Gold over Nickel (Standard): As shown.
- Tin/Lead over Nickel: Add suffix "S" to part # (e.g., 103-102KS).
- Mil type "A:" Gold over Nickel (Standard)
- Mil type "B" or "F:" Tin/Lead (solder) over Nickel.
- RoHS type: Order 103R - XXXKS

Mechanical Configuration

Units are epoxy encapsulated.
 Contact areas for reflow soldering are gold plated per MIL-G-45204 Type 1-Grade A. Internal connections are thermal compression bonded.

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 8000 pieces max.

Made In the U.S.A.

DASH NUMBER*
 MIL DASH #
 INDUCTANCE (µH) see Note 3
 TOLERANCE
 Q MINIMUM
 TEST FREQUENCY (MHz)
 SRF MINIMUM (MHz)
 DC RESISTANCE MAXIMUM (OHMS)
 CURRENT RATING MAX. (mA)

M83446/04- SERIES 103 PHENOLIC CORE								
-100(*)	30/37	0.010	± (**)	60	50.0	2700	0.060	1270
-120K	38	0.012	± 10%	57	50.0	2450	0.069	1190
-150(*)	31/39	0.015	± (**)	55	50.0	2200	0.078	1110
-180K	40	0.018	± 10%	52	50.0	2000	0.093	1030
-220(*)	32/41	0.022	± (**)	50	50.0	1800	0.108	950
-270K	42	0.027	± 10%	49	50.0	1625	0.114	925
-330(*)	33/43	0.033	± (**)	48	50.0	1450	0.120	900
-390K	44	0.039	± 10%	45	50.0	1335	0.133	860
-470(*)	34/45	0.047	± (**)	42	50.0	1220	0.145	820
-560K	46	0.056	± 10%	39	50.0	1110	0.170	760
-680(*)	35/47	0.068	± (**)	36	50.0	1000	0.195	705
-820K	48	0.082	± 10%	34	50.0	915	0.212	675
-101(*)	36/49	0.100	± (**)	32	50.0	830	0.230	650
M83446/04- SERIES 103 FERRITE CORE								
-121K	01	0.12	± 10%	30	25.0	750	0.125	880
-151K	02	0.15	± 10%	25	25.0	650	0.175	745
-181K	03	0.18	± 10%	25	25.0	550	0.200	695
-221K	04	0.22	± 10%	25	25.0	450	0.220	665
-271K	05	0.27	± 10%	25	25.0	375	0.230	650
-331K	06	0.33	± 10%	25	25.0	300	0.235	645
-391K	07	0.39	± 10%	22	25.0	235	0.240	635
-471K	08	0.47	± 10%	22	25.0	215	0.260	610
-561K	09	0.56	± 10%	22	25.0	195	0.278	590
-681K	10	0.68	± 10%	22	25.0	175	0.520	435
-821K	11	0.82	± 10%	22	25.0	160	0.530	430
-102K	12	1.0	± 10%	22	25.0	145	0.540	425
-122K	13	1.2	± 10%	22	7.9	130	0.740	360
-152K	14	1.5	± 10%	22	7.9	115	0.840	340
-182K	15	1.8	± 10%	22	7.9	105	0.920	325
-222K	16	2.2	± 10%	22	7.9	85	1.00	310
-272K	17	2.7	± 10%	24	7.9	77	1.15	290
-332K	18	3.3	± 10%	24	7.9	70	1.40	260
-392K	19	3.9	± 10%	24	7.9	68	1.55	250
-472K	20	4.7	± 10%	24	7.9	60	1.80	230
-562K	21	5.6	± 10%	22	7.9	55	2.00	220
-682K	22	6.8	± 10%	22	7.9	50	2.20	210
-822K	23	8.2	± 10%	22	7.9	48	2.50	195
-103K	24	10.0	± 10%	24	7.9	40	3.45	165
-123K	25	12.0	± 10%	25	2.5	35	3.80	160
-153K	26	15.0	± 10%	25	2.5	30	5.60	135
-183K	27	18.0	± 10%	25	2.5	28	5.80	130
-223K	28	22.0	± 10%	25	2.5	25	6.40	125
-273K	29	27.0	± 10%	25	2.5	22	6.90	120

Parts listed above are QPL/MIL qualified

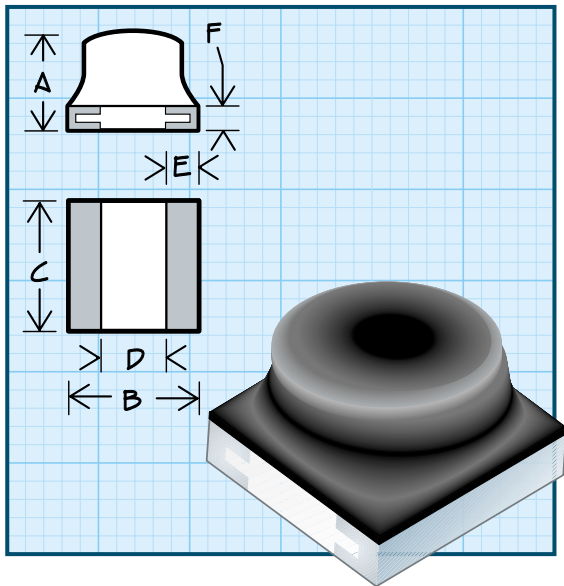
Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Notes 1) Designed specifically for reflow soldering and other high temperature processes with metalized edges to exhibit solder fillet. 2) Self Resonant Frequency (SRF) Values above 250 MHz are calculated and for reference only. 3) (**) - MS slash numbers available in 20% (Suffix "M") and 10% (Suffix "K") tolerances.

Micro i[®] Chip Inductors



Military Specifications

Series 105 MIL-PRF-83446 (Reference)
Series 108 MIL-PRF-83446/8 (Reference)

Physical Parameters for Series 105

	Inches	Millimeters
A	0.075 Max.	1.91 Max.
B	0.100 ± 0.010	2.54 ± .25
C	0.100 ± 0.010	2.54 ± .25
D	0.050 Min.	1.27 Min.
E	0.015 Min. (Typ.)	0.38 Min. (Typ.)
F	0.020 Max. (Typ.)	0.51 Max. (Typ.)

Physical Parameters for Series 108

	Inches	Millimeters
A	0.070 Max.	1.78 Max.
B	0.100 ± 0.010	2.54 ± .254
C	0.100 ± 0.010	2.54 ± .254
D	0.050 Min.	1.27 Min.
E	0.025 ± 0.005 (Typ.)	0.635 ± 0.13 (Typ.)
F	0.020 Max. (Typ.)	0.51 Max. (Typ.)

Weight Max. (Grams) 0.05

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature Range -55°C to +125°C

Maximum Power Dissipation at 90°C 0.135 W

Mechanical Configuration Units are epoxy encapsulated. Contact areas for reflow soldering are gold plated per MIL-G-45204 Type 1-Grade A. Internal connections are thermal compression bonded.

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 8000 pieces max.

Made in the U.S.A.

DASH NUMBER*
MIL DASH # (Reference)
INDUCTANCE (µH)
TOLERANCE
Q MINIMUM
TEST FREQUENCY (MHz)
SRF MINIMUM (MHz)
DC RESISTANCE MAXIMUM (OHMS)
CURRENT RATING MAX. (mA)

SERIES 105 IRON CORE

-121M	0.12	± 20%	40	25.0	500	0.14	830
-151M	0.15	± 20%	40	25.0	440	0.16	775
-181M	0.18	± 20%	40	25.0	405	0.19	710
-221K	0.22	± 10%	40	25.0	360	0.21	675
-271K	0.27	± 10%	40	25.0	330	0.23	650
-331K	0.33	± 10%	35	25.0	280	0.25	620
-391K	0.39	± 10%	35	25.0	185	0.28	585
-471K	0.47	± 10%	35	25.0	178	0.31	555
-561K	0.56	± 10%	35	25.0	163	0.45	460
-681K	0.68	± 10%	35	25.0	160	0.62	395
-821K	0.82	± 10%	30	25.0	155	0.65	385
-102K	1.0	± 10%	30	25.0	130	0.73	360
-122K	1.2	± 10%	25	7.9	115	1.0	310
-152K	1.5	± 10%	25	7.9	100	1.2	280
-182K	1.8	± 10%	25	7.9	90	1.5	250
-222K	2.2	± 10%	25	7.9	75	1.7	235
-272K	2.7	± 10%	25	7.9	68	2.0	220
-332K	3.3	± 10%	25	7.9	62	2.2	210
-392K	3.9	± 10%	25	7.9	57	2.8	185
-472K	4.7	± 10%	30	7.9	52	3.1	175
-562K	5.6	± 10%	30	7.9	47	3.3	170
-682K	6.8	± 10%	30	7.9	42	3.8	160
-822K	8.2	± 10%	30	7.9	40	5.0	135
-103K	10.0	± 10%	30	7.9	38	5.6	130

M83446/08- (Reference) SERIES 108 IRON CORE

-123K	87	12.0	± 10%	36	2.5	26.0	4.0	79
-153K	88	15.0	± 10%	32	2.5	24.0	4.2	79
-183K	89	18.0	± 10%	32	2.5	21.0	4.4	75
-223K	90	22.0	± 10%	32	2.5	19.0	7.5	57
-273K	91	27.0	± 10%	32	2.5	14.0	8.0	55
-333K	92	33.0	± 10%	30	2.5	12.0	13.0	45
-393K	93	39.0	± 10%	30	2.5	10.0	17.0	38
-473K	94	47.0	± 10%	30	2.5	9.0	19.0	36
-563K	95	56.0	± 10%	30	2.5	8.5	23.0	33
-683K	96	68.0	± 10%	30	2.5	8.2	25.0	32
-823K	97	82.0	± 10%	30	2.5	8.0	28.0	30
-104K	98	100.0	± 10%	30	2.5	7.0	31.0	28

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

***Complete part # must include series # PLUS the dash #**

For further surface finish information, refer to TECHNICAL section of this catalog.

Termination Finish Options (Part # Code)

Gold over Nickel (Standard): As shown.

Tin/Lead over Nickel: Add suffix "S" to part # (e.g., 105-102KS or 108-473KS).

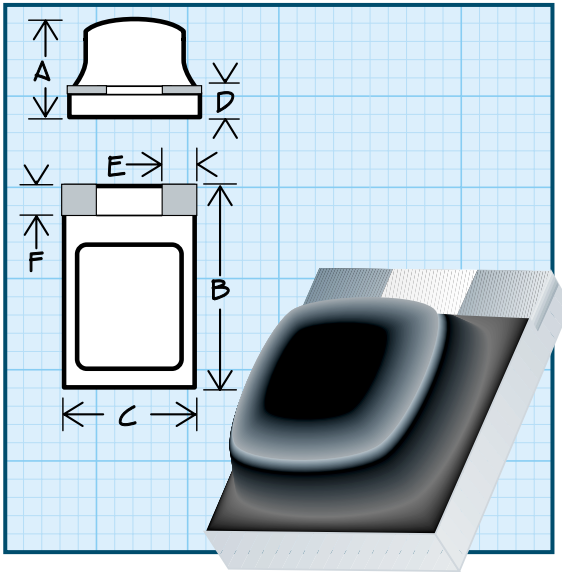
Mil type "A:" Gold over Nickel (Standard)

Mil type "B" or "F:" Tin/Lead (solder) over Nickel.

RoHS type: Order 105R - XXXKS or 108R - XXXKS

Notes 1) Designed specifically for reflow soldering and other high temperature processes with metalized edges to exhibit solder fillet. **2)** Self Resonant Frequency (SRF) Values above 185 MHz for Series 105 are calculated (reference only).

Wire Bondable Chip Inductors



Physical Parameters

	Inches	Millimeters
A	0.075 Max.	1.91 Max.
B	0.155 Max.	3.94 Max.
C	0.110 Max	2.79 Max
D	0.015 Ref.	0.38 Ref.
E	0.030 ± 0.005	0.76 ± 0.13
F	0.025 Min.	0.64 Min.

Weight Max. (Grams) 0.2

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature -55°C to +125°C

Maximum Power Dissipation at 90°C 0.140 W

Termination Areas Gold plated per MIL-G-45204, Type III; Grade A. Internal Connections are Thermal Compression Bonded

****Note** Self Resonant Frequency (SRF) values above 230 MHz are calculated and for reference only

Packaging Bulk only

Made in the U.S.A.

DASH NUMBER*	INDUCTANCE (µh) ± 10%	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)**	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAX. (mA)
SERIES 106 PHENOLIC CORE						
-100K	0.010	45	150	1700	0.070	1200
-120K	0.012	45	150	1600	0.070	1200
-150K	0.015	45	150	1500	0.070	1200
-180K	0.018	45	150	1400	0.070	1200
-220K	0.022	45	100	1300	0.070	1200
-270K	0.027	45	100	1200	0.070	1200
-330K	0.033	47	100	1100	0.070	1200
-390K	0.039	47	100	1000	0.070	1200
-470K	0.047	47	100	900	0.080	1100
-560K	0.056	47	100	850	0.090	1050
-680K	0.068	47	100	840	0.100	1000
-820K	0.082	47	100	750	0.110	960
SERIES 106 IRON CORE						
-101K	0.10	40	25.0	550	0.15	820
-121K	0.12	42	25.0	400	0.20	710
-151K	0.15	42	25.0	350	0.25	635
-181K	0.18	45	25.0	300	0.30	580
-221K	0.22	45	25.0	260	0.33	550
-271K	0.27	45	25.0	230	0.37	520
-331K	0.33	45	25.0	200	0.40	500
-391K	0.39	45	25.0	190	0.45	475
-471K	0.47	45	25.0	180	0.50	450
-561K	0.56	42	25.0	170	0.55	425
-681K	0.68	42	25.0	160	0.60	410
-821K	0.82	42	25.0	150	0.70	380
-102K	1.0	42	25.0	130	0.80	355
-122K	1.2	36	7.9	120	0.90	335
-152K	1.5	36	7.9	100	1.10	300
-182K	1.8	38	7.9	90	1.30	265
-222K	2.2	38	7.9	85	1.50	250
-272K	2.7	41	7.9	82	1.70	230
-332K	3.3	42	7.9	75	1.80	225
-392K	3.9	42	7.9	65	2.00	215
-472K	4.7	41	7.9	55	2.30	200
-562K	5.6	41	7.9	45	2.60	185
-682K	6.8	36	7.9	40	2.80	180
-822K	8.2	36	7.9	35	3.00	175
-103K	10.0	36	7.9	33	3.30	165
-123K	12.0	32	2.5	26	4.00	150
-153K	15.0	32	2.5	24	5.20	135
-183K	18.0	32	2.5	21	4.50	130
-223K	22.0	32	2.5	19	7.50	110
-273K	27.0	32	2.5	14	8.00	105
-333K	33.0	30	2.5	12	13.0	85
-393K	39.0	30	2.5	10	17.0	75
-473K	47.0	30	2.5	9.0	19.0	70

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

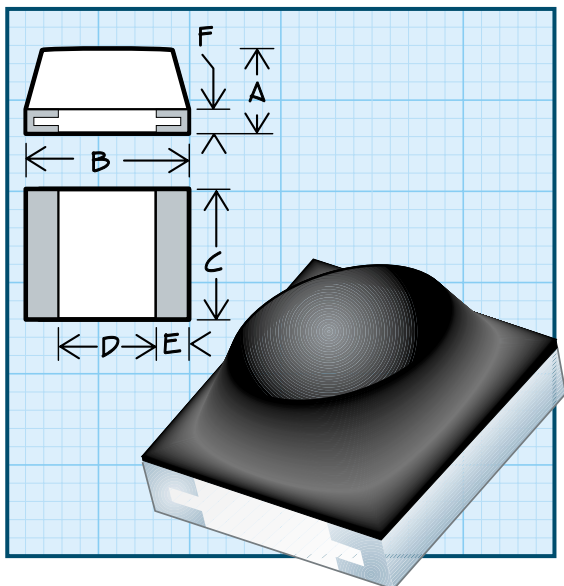
***Complete part # must include series # PLUS the dash #**

For further surface finish information, refer to TECHNICAL section of this catalog.

RF INDUCTORS

Micro i® Chip Inductors

RF INDUCTORS



Military Specifications MIL-PRF-83446/38

Physical Parameters

	Inches	Millimeters
A	0.080 Max.	2.03 Max.
B	0.145 to 0.155	3.68 to 3.94
C	0.115 to 0.125	2.92 to 3.18
D	0.070 Min.	1.78 Min.
E	0.020 to 0.030	0.508 to 0.762
F	0.020 Max. (Typ.)	0.51 Max.

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature Range -55°C to +125°C

Maximum Power Dissipation at 90°C 0.175 W

Termination Standard-Tin/Lead. For RoHS, order 160R - XXXKS. Contact factory for other finish options.

Notes 1) Designed specifically for reflow soldering and other high temperature processes with metallized edges to exhibit solder fillet. 2) Optional marking is available. Parts can be printed with dash number (ie 100, 120, etc.). Add suffix M to part number.

For inductance values above 560µH, consult factory.

Mechanical Configuration Units are epoxy encapsulated. Contact area for reflow are solder coated. Internal connections are thermal compression bonded.

Packaging Bulk only

For further surface finish information, refer to TECHNICAL section of this catalog.

Made in the U.S.A.

M83446/38 – SERIES 160 PHENOLIC CORE								
DASH NUMBER*	MIL DASH #	INDUCTANCE (µH)	TOLERANCE	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAX. (ma)
-100MS	01	0.010	± 20%	48	150	900	0.050	1590
-120MS	02	0.012	± 20%	48	150	900	0.055	1515
-150MS	03	0.015	± 20%	48	150	900	0.060	1450
-180MS	04	0.018	± 20%	48	150	900	0.065	1395
-220MS	05	0.022	± 20%	48	100	900	0.070	1345
-270MS	06	0.027	± 20%	48	100	900	0.075	1295
-330MS	07	0.033	± 20%	48	100	900	0.075	1295
-390MS	08	0.039	± 20%	48	100	900	0.080	1255
-470MS	09	0.047	± 20%	48	100	850	0.085	1220
-560MS	10	0.056	± 20%	48	100	800	0.088	1195
-680MS	11	0.068	± 20%	48	100	750	0.093	1165
-820MS	12	0.082	± 20%	48	100	700	0.095	1150

M83446/38 – SERIES 160 IRON CORE								
DASH NUMBER*	MIL DASH #	INDUCTANCE (µH)	TOLERANCE	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAX. (ma)
-101KS	13	0.100	± 10%	50	25.0	600	0.075	1295
-121KS	14	0.120	± 10%	50	25.0	550	0.075	1295
-151KS	15	0.150	± 10%	50	25.0	420	0.085	1220
-181KS	16	0.180	± 10%	50	25.0	390	0.10	1125
-221KS	17	0.220	± 10%	50	25.0	340	0.11	1070
-271KS	18	0.270	± 10%	50	25.0	290	0.12	1025
-301KS	19	0.300	± 10%	50	25.0	250	0.13	985
-331KS	20	0.330	± 10%	50	25.0	230	0.14	950
-361KS	21	0.360	± 10%	50	25.0	220	0.15	915
-391KS	22	0.390	± 10%	50	25.0	210	0.16	890
-421KS	23	0.430	± 10%	50	25.0	200	0.17	860
-471KS	24	0.470	± 10%	50	25.0	190	0.18	835
-561KS	25	0.560	± 10%	50	25.0	180	0.20	795
-681KS	26	0.680	± 10%	50	25.0	170	0.23	740
-821KS	27	0.820	± 10%	50	25.0	150	0.26	695
-102JS	28	1.00	± 5%	50	25.0	140	0.34	610
-122JS	29	1.20	± 5%	36	7.9	130	0.42	545
-152JS	30	1.50	± 5%	36	7.9	120	0.56	475
-182JS	31	1.80	± 5%	36	7.9	100	0.76	410
-222JS	32	2.20	± 5%	36	7.9	98	0.93	370
-272JS	33	2.70	± 5%	40	7.9	91	1.2	325
-332JS	34	3.30	± 5%	40	7.9	76	1.3	310
-392JS	35	3.90	± 5%	47	7.9	48	1.5	290
-472JS	36	4.70	± 5%	47	7.9	46	1.7	275
-562JS	37	5.60	± 5%	44	7.9	42	1.8	270
-682JS	38	6.80	± 5%	40	7.9	39	1.9	255
-822JS	39	8.20	± 5%	40	7.9	30	2.4	230
-103JS	40	10.0	± 5%	46	7.9	26	3.2	200
-123JS	41	12.0	± 5%	41	2.5	24	3.7	185
-153JS	42	15.0	± 5%	46	2.5	23	3.8	180
-183JS	43	18.0	± 5%	46	2.5	22	4.2	175
-223JS	44	22.0	± 5%	47	2.5	18	5.5	150
-273JS	45	27.0	± 5%	47	2.5	17	6.1	145
-333JS	46	33.0	± 5%	47	2.5	13	6.6	140
-393JS	47	39.0	± 5%	50	2.5	12	7.0	135

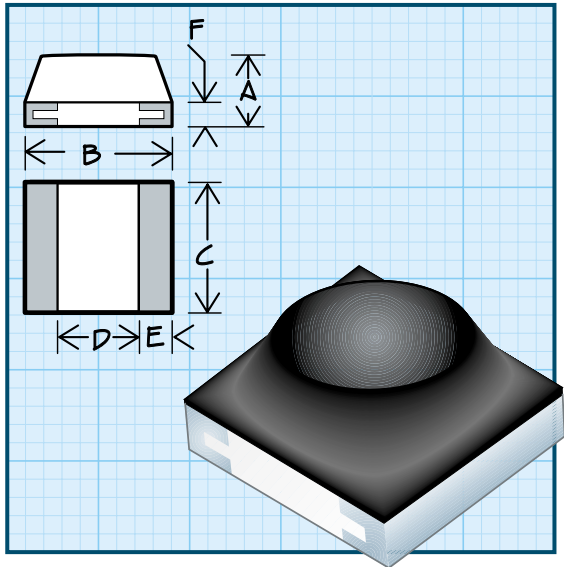
M83446/38 – SERIES 160 FERRITE CORE								
DASH NUMBER*	MIL DASH #	INDUCTANCE (µH)	TOLERANCE	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAX. (ma)
-473JS	48	47.0	± 5%	50	2.5	11.0	8.3	125
-563JS	49	56.0	± 5%	50	2.5	10.0	8.9	120
-683JS	50	68.0	± 5%	50	2.5	9.1	13.0	100
-823JS	51	82.0	± 5%	50	2.5	8.6	14.0	95
-104JS	52	100.0	± 5%	47	2.5	7.6	16.0	90
-124JS	53	120.0	± 5%	30	0.79	6.8	17.0	85
-154JS	54	150.0	± 5%	32	0.79	5.6	18.0	80
-184JS	55	180.0	± 5%	32	0.79	4.5	22.0	75
-224JS	56	220.0	± 5%	32	0.79	4.0	28.0	70
-274JS	57	270.0	± 5%	32	0.79	3.8	32.0	65
-334JS	58	330.0	± 5%	32	0.79	3.5	44.0	55
-394JS	59	390.0	± 5%	32	0.79	3.4	48.0	50
-474JS	60	470.0	± 5%	28	0.79	3.2	75.0	42
-564JS	61	560.0	± 5%	28	0.79	2.8	81.0	40

Parts listed above are QPL/MIL qualified

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

Micro i® Low Profile Chip Inductors



Physical Parameters

	Inches	Millimeters
A	0.050 Max.	1.27 Max.
B	0.100±0.010	2.54±.254
C	0.100±0.010	2.54±.254
D	0.050 Min.	1.27 Min.
E	0.015 Min. (Typ)	0.38 Min. (Typ)
F	0.020 Max. (Typ)	0.51 Max. (Typ)

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature Range -55°C to +125°C

Maximum Power Dissipation at 90°C 0.105 W

Core Material Powdered iron core for improved temperature stability.

Mechanical Configuration Units are epoxy encapsulated. Contact area for reflow soldering are gold plated per MIL-G-45204 Type 1 Grade A. Internal connections are thermal compression bonded.

Termination Finish Options

Standard: Gold over Nickel.

For Tin/Lead over Nickel: Add suffix "S" to part number and allow an additional .010 inch for maximum height. For RoHS, order 3090R - XXXKS.

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 8000 pieces max.

MIL-PRF-83446 (Reference) for testing methods only.

Made in the U.S.A.

DASH NUMBER*
INDUCTANCE (µH)
TOLERANCE
Q MINIMUM
TEST FREQUENCY (MHz)
SRF MINIMUM (MHz)
DC RESISTANCE MAXIMUM (OHMS)
CURRENT RATING MAX. (mA)

SERIES 3090 IRON CORE							
-100M	0.010	± 20%	42	50.0	1000	0.095	890
-150M	0.015	± 20%	42	50.0	1000	0.115	810
-220M	0.022	± 20%	40	50.0	1000	0.140	765
-330K	0.033	± 10%	40	50.0	900	0.185	640
-390K	0.039	± 10%	40	50.0	900	0.100	870
-470K	0.047	± 10%	38	50.0	900	0.110	830
-560K	0.056	± 10%	35	50.0	800	0.135	750
-680K	0.068	± 10%	30	50.0	700	0.16	690
-820K	0.082	± 10%	25	50.0	650	0.19	630
-101K	0.10	± 10%	32	25.0	510	0.08	970
-121K	0.12	± 10%	32	25.0	410	0.10	870
-151K	0.15	± 10%	32	25.0	370	0.12	795
-181K	0.18	± 10%	32	25.0	330	0.14	765
-221K	0.22	± 10%	34	25.0	300	0.16	690
-271K	0.27	± 10%	34	25.0	250	0.20	615
-331K	0.33	± 10%	34	25.0	220	0.25	550
-391K	0.39	± 10%	34	25.0	200	0.30	500
-471K	0.47	± 10%	34	25.0	180	0.36	460
-561K	0.56	± 10%	34	25.0	160	0.45	410
-681K	0.68	± 10%	30	25.0	140	0.50	390
-821K	0.82	± 10%	28	25.0	120	0.60	355
-102K	1.00	± 10%	24	25.0	100	0.70	330
-122K	1.20	± 10%	24	7.9	95	1.10	265
-152K	1.50	± 10%	24	7.9	90	1.20	250
-182K	1.80	± 10%	24	7.9	85	1.25	245
-222K	2.20	± 10%	25	7.9	80	1.30	240
-272K	2.70	± 10%	25	7.9	70	1.50	225
-332K	3.30	± 10%	25	7.9	65	1.90	200
-392K	3.90	± 10%	25	7.9	60	2.30	180
-472K	4.70	± 10%	24	7.9	55	3.00	160
-562K	5.60	± 10%	22	7.9	53	3.50	145
-682K	6.80	± 10%	22	7.9	50	4.00	135
-822K	8.20	± 10%	22	7.9	45	4.50	130
-103K	10.0	± 10%	20	7.9	40	5.00	120

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

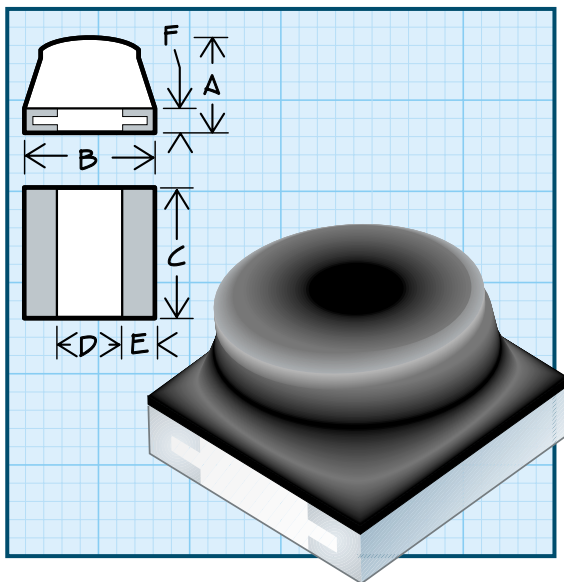
*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Notes 1) Designed specifically for reflow soldering and other high temperature processes with metalized edges to exhibit solder fillet. 2) Self Resonant Frequency (SRF) values 250 MHz and above are calculated and for reference only.

RF INDUCTORS

Micro i® Chip Inductors



Physical Parameters

	Inches	Millimeters
A	0.140 Max.	3.56 Max.
B	0.147 to 0.163	3.73 to 4.14
C	0.117 to 0.133	2.97 to 3.38
D	0.070 Min.	1.78 Min.
E	0.017 to 0.033	0.43 to 0.84
F	0.020 Max. (Typ)	0.51 Max. (Typ.)

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature Range -55°C to +125°C

Maximum Power Dissipation at 90°C 0.155 W

Inductance tolerance desired is specified by suffixing an alpha character to the part number: F = 1%, G = 2%, H = 3%, J = 5%, K = 10%, and M = 20%. Standard series tolerance is ±10%. For inductance values less than .10µH, minimum tolerance is ±5%.

Termination Standard-Tin/Lead Sn63. For RoHS, order 3094R - XXXKS. Contact factory for other finish options.

Mechanical Configuration Units are epoxy encapsulated. Contact area for reflow are solder coated. Internal connections are thermal compression bonded.

Packaging Tape & reel (12mm): 7" reel, 650 pieces max.; 13" reel, 2500 pieces max.

MIL-PRF-83446/10 (Reference)

***Complete part # must include series # PLUS the dash #**

For further surface finish information, refer to TECHNICAL section of this catalog.

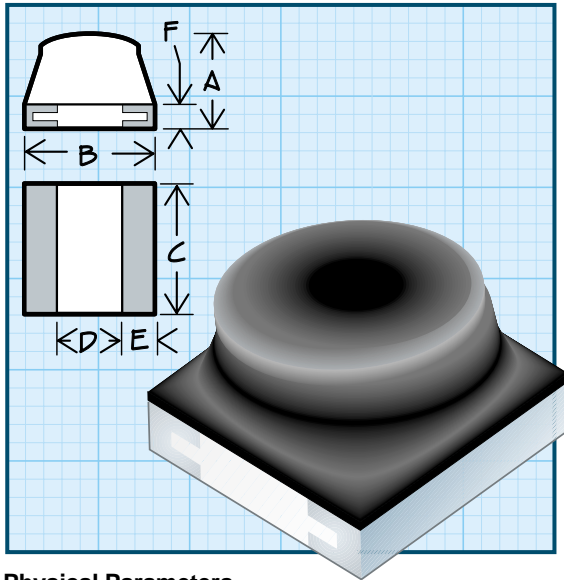
Made in the U.S.A.

M83446/10- (Reference) SERIES 3094 IRON CORE

	DASH NUMBER*	MIL DASH # (Reference)	INDUCTANCE (µH) ± 10%	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAX. (mA)
-100KS	62	0.010	60	150	2000.0	0.040	1000	
-120KS	63	0.012	60	150	1800.0	0.040	1000	
-150KS	64	0.015	60	150	1500.0	0.040	1000	
-180KS	65	0.018	60	150	1500.0	0.040	1000	
-220KS	66	0.022	60	100	1300.0	0.050	1000	
-270KS	67	0.027	60	100	1300.0	0.050	1000	
-330KS	68	0.033	60	100	1000.0	0.050	1000	
-390KS	69	0.039	60	100	1000.0	0.060	900	
-470KS	70	0.047	65	100	800.0	0.060	900	
-560KS	71	0.056	65	100	760.0	0.060	900	
-680KS	72	0.068	65	100	700.0	0.070	840	
-820KS	73	0.082	65	100	650.0	0.070	840	
-101KS	74	0.100	65	50	570.0	0.070	840	
-121KS	75	0.120	65	50	520.0	0.070	840	
-151KS	76	0.150	75	50	400.0	0.080	790	
-181KS	77	0.180	75	50	360.0	0.080	790	
-221KS	78	0.220	70	50	320.0	0.080	790	
-271KS	79	0.270	70	50	270.0	0.10	700	
-331KS	80	0.330	70	50	240.0	0.10	700	
-391KS	81	0.390	70	50	220.0	0.10	700	
-471KS	82	0.470	70	25	190.0	0.14	590	
-561KS	83	0.560	70	25	170.0	0.19	510	
-681KS	84	0.680	70	25	160.0	0.26	430	
-821KS	85	0.820	75	25	150.0	0.30	400	
-102KS	86	1.00	75	25	130.0	0.34	380	
-122KS	87	1.20	65	7.9	120.0	0.45	330	
-152KS	88	1.50	65	7.9	110.0	0.57	290	
-182KS	89	1.80	65	7.9	100.0	0.72	260	
-222KS	90	2.20	65	7.9	80.0	0.90	230	
-272KS	91	2.70	65	7.9	60.0	1.10	210	
-332KS	92	3.30	60	7.9	50.0	1.20	200	
-392KS	93	3.90	60	7.9	45.0	1.40	180	
-472KS	94	4.70	60	7.9	42.0	1.60	170	
-562KS	95	5.60	65	7.9	40.0	1.80	160	
-682KS	96	6.80	65	7.9	37.0	2.40	140	
-822KS	97	8.20	65	7.9	34.0	3.00	130	
-103KS	98	10.0	65	7.9	29.0	3.50	120	
-123KS	99	12.0	60	2.5	27.0	3.60	118	
-153KS	100	15.0	60	2.5	22.0	3.70	115	
-183KS	101	18.0	60	2.5	17.0	3.80	114	
-223KS	102	22.0	60	2.5	16.0	3.90	113	
-273KS	103	27.0	65	2.5	15.0	4.00	110	
-333KS	104	33.0	65	2.5	14.0	5.00	100	
-393KS	105	39.0	65	2.5	13.0	7.00	84	
-473KS	106	47.0	70	2.5	12.0	8.00	79	
-563KS	107	56.0	70	2.5	11.0	10.0	70	
-683KS	108	68.0	65	2.5	10.0	11.0	67	
-823KS	109	82.0	60	2.5	9.0	12.0	64	
-104KS	110	100.0	60	2.5	8.0	13.0	62	
-124KS	111	120.0	40	0.79	7.0	14.0	59	
-154KS	112	150.0	40	0.79	6.0	16.0	56	
-184KS	113	180.0	40	0.79	5.0	18.0	52	
-224KS	114	220.0	40	0.79	4.0	24.0	45	
-274KS	115	270.0	40	0.79	3.3	25.0	44	
-334KS	116	330.0	40	0.79	3.1	29.0	41	
-394KS	117	390.0	40	0.79	2.9	32.0	39	
-474KS	118	470.0	35	0.79	2.4	35.0	37	
-564KS	119	560.0	35	0.79	2.1	45.0	33	
-684KS	120	680.0	35	0.79	1.9	55.0	30	
-824KS	121	820.0	30	0.79	1.8	70.0	26	
-105KS	122	1000.0	30	0.79	1.7	80.0	25	

Notes 1) Designed specifically for reflow soldering and other high temperature processes with metalized edges to exhibit solder fillet. 2) Self Resonant Frequency (SRF) values 270 MHz and above are calculated and for reference only. 3) Optional marking is available.

Shielded Surface Mount Inductors



Physical Parameters

	Inches	Millimeters
A	0.140 Max.	3.56 Max.
B	0.147 to 0.163	3.73 to 4.14
C	0.117 to 0.133	2.97 to 3.38
D	0.070 Min.	1.78 Min.
E	0.017 to 0.033	0.43 to 0.84
F	0.020 Max (Typ)	0.51 Max. (Typ)

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature -55°C to +125°C

Maximum Power Dissipation at 90°C 0.155 W

Termination Standard-Tin/Lead Sn63. For RoHS, order 4379R - XXXKS. Contact factory for other finish options.

Inductance Tolerance Desired tolerance is specified by substituting alpha characters in the part number: H=3%, J=5%, K=10%, and M=20%. Standard series tolerance is ±10%.

Mechanical Configuration Units are epoxy encapsulated. Contact area for reflow are solder coated. Internal connections are thermal compression bonded.

Notes 1) Designed specifically for reflow soldering and other high temperature processes with metalized edges to exhibit solder fillet. 2) Self Resonant Frequency (SRF) values 260 MHz and above are calculated and for reference only. 3) Optional marking is available.

Packaging Tape & reel (12mm): 7" reel, 650 pieces max.; 13" reel, 2500 pieces max.

MIL-PRF-83446/11 (Reference)

Made in the U.S.A.

DASH NUMBER*
MIL DASH # (Reference)
INDUCTANCE (µH) ±10%
Q MINIMUM
TEST FREQUENCY (MHz)
SRF MINIMUM (MHz)
DC RESISTANCE MAXIMUM (OHMS)
CURRENT RATING MAX. (mA)

M83446/11- (Ref.)		SERIES 4379 FERRITE CORE & SLEEVE						
-101KS	62	0.10	79	25.0	600	0.03	1000	
-121KS	63	0.12	79	25.0	520	0.03	1000	
-151KS	64	0.15	79	25.0	490	0.03	1000	
-181KS	65	0.18	79	25.0	460	0.04	1000	
-221KS	66	0.22	79	25.0	430	0.04	1000	
-271KS	67	0.27	88	25.0	370	0.04	1000	
-331KS	68	0.33	93	25.0	310	0.05	750	
-391KS	69	0.39	102	25.0	280	0.05	750	
-471KS	70	0.47	106	25.0	260	0.05	750	
-561KS	71	0.56	106	25.0	240	0.06	700	
-681KS	72	0.68	106	25.0	200	0.06	700	
-821KS	73	0.82	106	25.0	185	0.06	700	
-102KS	74	1.0	106	25.0	175	0.09	650	
-122KS	75	1.2	90	7.9	150	0.09	650	
-152KS	76	1.5	100	7.9	135	0.14	600	
-182KS	77	1.8	100	7.9	120	0.20	500	
-222KS	78	2.2	100	7.9	105	0.30	400	
-272KS	79	2.7	100	7.9	85	0.40	350	
-332KS	80	3.3	100	7.9	80	0.46	330	
-392KS	81	3.9	105	7.9	64	0.52	310	
-472KS	82	4.7	115	7.9	56	0.54	300	
-562KS	83	5.6	115	7.9	49	0.60	285	
-682KS	84	6.8	115	7.9	45	0.66	270	
-822KS	85	8.2	115	7.9	41	1.00	225	
-103KS	86	10	100	7.9	39	1.20	200	
-123KS	87	12	100	2.5	34	1.5	180	
-153KS	88	15	100	2.5	30	1.8	170	
-183KS	89	18	100	2.5	26	1.9	160	
-223KS	90	22	105	2.5	23	2.1	150	
-273KS	91	27	110	2.5	20	2.4	140	
-333KS	92	33	120	2.5	18	2.7	130	
-393KS	93	39	120	2.5	17	3.1	125	
-473KS	94	47	120	2.5	16	3.2	125	
-563KS	95	56	110	2.5	14	3.5	120	
-683KS	96	68	110	2.5	12	4.0	111	
-823KS	97	82	110	2.5	10	4.8	102	
-104KS	98	100	110	2.5	9.4	5.7	93	
-124KS	99	120	85	0.79	8.0	6.2	89	
-154KS	100	150	85	0.79	8.0	6.3	89	
-184KS	101	180	85	0.79	6.9	6.4	88	
-224KS	102	220	85	0.79	6.1	7.4	82	
-274KS	103	270	85	0.79	5.2	8.1	78	
-334KS	104	330	100	0.79	4.6	8.8	75	
-394KS	105	390	100	0.79	4.0	9.7	72	
-474KS	106	470	100	0.79	3.6	10.0	69	
-564KS	107	560	100	0.79	2.8	11.0	66	
-684KS	108	680	100	0.79	2.3	12.0	64	
-824KS	109	820	95	0.79	2.1	17.0	53	
-105KS	110	1000	95	0.79	2.0	22.0	47	
-125KS	111	1200	75	0.25	1.7	24.0	45	
-155KS	112	1500	75	0.25	1.6	25.0	44	
-185KS	113	1800	75	0.25	1.5	27.0	43	
-225KS	114	2200	75	0.25	1.4	30.0	40	
-275KS	115	2700	75	0.25	1.3	34.0	38	
-335KS	116	3300	75	0.25	1.2	39.0	35	
-395KS	117	3900	75	0.25	1.1	56.0	29	
-475KS	118	4700	75	0.25	1.0	70.0	26	
-565KS	119	5600	75	0.25	0.9	80.0	25	
-685KS	120	6800	75	0.25	0.8	90.0	23	
-825KS	121	8200	75	0.25	0.7	100.0	22	
-106KS	122	10000	75	0.25	0.7	110.0	21	

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

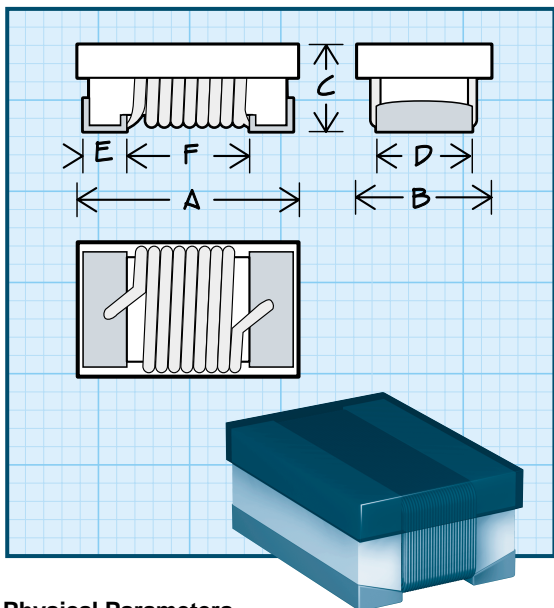
*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

RF INDUCTORS

Open Construction
Wirewound Surface Mount Inductors

RF INDUCTORS



Physical Parameters

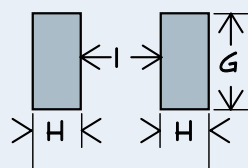
	Inches	Millimeters
A	0.050 Max.	1.27 Max.
B	0.030 Max.	0.76 Max.
C	0.024 Max.	0.61 Max.
D	0.020 (Ref. Only)	0.51 (Ref. Only)
E	0.009 (Ref. Only)	0.23 (Ref. Only)
F	0.022 (Ref. Only)	0.56 (Ref. Only)
G	0.026	0.66
H	0.019	0.50
I	0.018	0.46

Operating Temperature Range -40°C to +125°C

Inductance and Q tested on HP4291A using HP16193A test fixture, or equivalent

Packaging Tape & reel (8mm): 7" reel, 4000 pieces max.

LAND PATTERN DIMENSIONS



DASH NUMBER*

INDUCTANCE
(nH) ±10%

Q MINIMUM

INDUCTANCE & Q TEST
FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAXIMUM (mA)

SERIES 0402 CERAMIC CORE

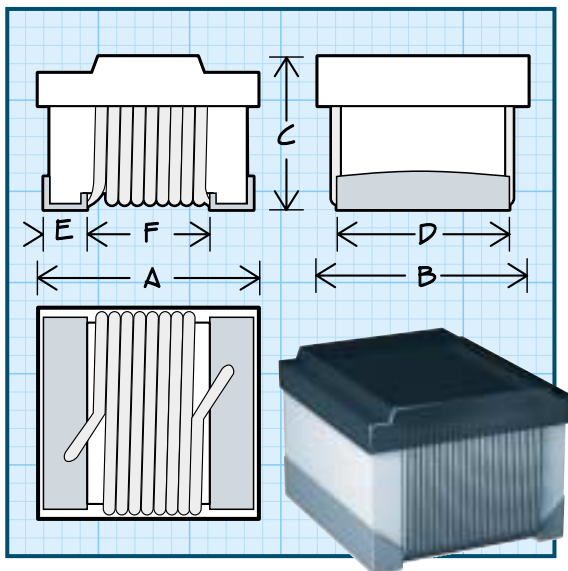
-1N0K	1.0	16	250	12,700	0.045	1360
-1N9K	1.9	16	250	11,300	0.070	1040
-2N0K	2.0	16	250	11,100	0.070	1040
-2N2K	2.2	19	250	10,800	0.070	960
-2N4K	2.4	15	250	10,500	0.070	790
-2N7K	2.7	16	250	10,400	0.120	640
-3N3K	3.3	19	250	7000	0.066	840
-3N6K	3.6	19	250	6800	0.066	840
-3N9K	3.9	19	250	5800	0.066	840
-4N3K	4.3	18	250	6000	0.091	700
-4N7K	4.7	15	250	4700	0.130	640
-5N1K	5.1	20	250	4800	0.083	800
-5N6K	5.6	20	250	4800	0.083	760
-6N2K	6.2	20	250	4800	0.083	760
-6N8K	6.8	20	250	4800	0.083	680
-7N5K	7.5	22	250	4800	0.104	680
-8N2K	8.2	22	250	4400	0.104	680
-8N7K	8.7	18	250	4100	0.200	480
-9N0K	9.0	22	250	4160	0.104	680
-10NK	10	21	250	3900	0.195	480
-11NK	11	24	250	3680	0.120	640
-12NK	12	24	250	3600	0.120	640
-13NK	13	24	250	3450	0.210	440
-15NK	15	24	250	3280	0.172	560
-16NK	16	24	250	3100	0.220	560
-18NK	18	24	250	3100	0.230	420
-19NK	19	24	250	3040	0.202	480
-20NK	20	25	250	3000	0.250	420
-22NK	22	25	250	2800	0.300	400
-23NK	23	24	250	2720	0.300	400
-24NK	24	25	250	2700	0.300	400
-27NK	27	24	250	2480	0.300	400
-30NK	30	25	250	2350	0.350	400
-33NK	33	24	250	2350	0.350	400
-36NK	36	24	250	2320	0.440	320
-39NK	39	25	250	2100	0.550	200
-40NK	40	24	250	2240	0.440	320
-43NK	43	25	250	2030	0.810	100
-47NK	47	20	250	2100	0.830	150
-51NK	51	25	250	1750	0.820	100
-56NK	56	22	250	1700	0.970	100
-68NK	68	22	250	1620	1.120	100

Optional Tolerances (except 1.0nH & 1.9nH): J = 5%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Open Construction
Wirewound Surface Mount Inductors



Physical Parameters

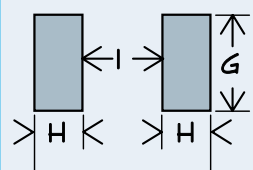
	Inches	Millimeters
A	0.071 Max.	1.80 Max.
B	0.045 Max.	1.14 Max.
C	0.040 Max.	1.02 Max.
D	0.030 (Ref. only)	0.76 (Ref. only)
E	0.018 (Ref. only)	0.44 (Ref. only)
F	0.040 (Ref. only)	1.03 (Ref. only)
G	0.040	1.03
H	0.025	0.64
I	0.025	0.64

Operating Temperature Range -40°C to +125°C

Inductance and Q tested on HP4291A using HP16193A test fixture, or equivalent

Packaging Tape & reel (8mm): 7" reel, 4000 pieces max.

LAND PATTERN
DIMENSIONS



DASH NUMBER*

INDUCTANCE
(nH) ±10%

Q MINIMUM

INDUCTANCE & Q TEST
FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAXIMUM (mA)

SERIES 0603 CERAMIC CORE

-1N6K	1.6	16	250	6000	0.040	700
-1N8K	1.8	16	250	6000	0.045	700
-3N3K	3.3	22	250	6000	0.080	700
-3N6K	3.6	22	250	5800	0.063	700
-3N9K	3.9	22	250	6000	0.080	700
-4N3K	4.3	22	250	5800	0.063	700
-4N7K	4.7	25	250	5800	0.120	700
-5N1K	5.1	20	250	5800	0.160	700
-5N6K	5.6	20	250	5800	0.170	700
-6N8K	6.8	27	250	5800	0.110	700
-7N5K	7.5	27	250	4800	0.110	700
-8N2K	8.2	27	250	4800	0.110	700
-8N7K	8.7	27	250	4800	0.110	700
-9N5K	9.5	27	250	4800	0.130	700
-10NK	10	31	250	4800	0.130	700
-11NK	11	31	250	4000	0.086	700
-12NK	12	35	250	4000	0.130	700
-15NK	15	35	250	4000	0.170	700
-16NK	16	35	250	3300	0.110	700
-18NK	18	35	250	3100	0.170	700
-22NK	22	38	250	3000	0.190	700
-24NK	24	38	250	2800	0.130	700
-27NK	27	40	250	2800	0.220	600
-30NK	30	40	250	2800	0.150	600
-33NK	33	40	250	2300	0.220	600
-36NK	36	40	250	2300	0.250	600
-39NK	39	40	250	2200	0.250	600
-43NK	43	38	200	2000	0.280	600
-47NK	47	38	200	2000	0.280	600
-56NK	56	38	200	1900	0.310	600
-68NK	68	37	200	1700	0.340	600
-72NK	72	34	150	1700	0.490	400
-82NK	82	34	150	1700	0.540	400
-101K	100	34	150	1400	0.580	400
-111K	110	32	150	1350	0.610	300
-121K	120	32	150	1300	0.650	300
-151K	150	32	100	1300	0.950	280
-181K	180	25	100	1200	1.400	250
-221K	220	25	100	1200	1.600	250
-271K	270	25	100	900	2.100	200
-331K	330	25	100	900	3.800	100
-391K	390	25	100	900	4.350	100

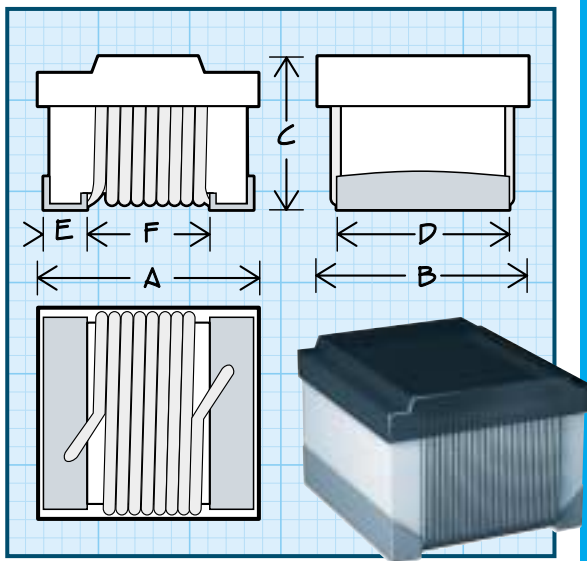
Optional Tolerances: 9.5nH & Lower J = 5%

All Other Values: J = 5% G = 2%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Open Construction
Wirewound Surface Mount Inductors



Physical Parameters

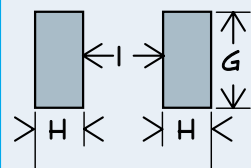
	Inches	Millimeters
A	0.090 Max.	2.29 Max.
B	0.068 Max.	1.73 Max.
C	0.060 Max.	1.52 Max.
D	0.050 (Ref. only)	1.27 (Ref. only)
E	0.018 (Ref. only)	0.44 (Ref. only)
F	0.040 (Ref. only)	1.03 (Ref. only)
G	0.070	1.78
H	0.040	1.02
I	0.030	0.76

Operating Temperature Range -40°C to +125°C

Inductance and Q tested on HP4291A using HP16193A test fixture, or equivalent

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.

LAND PATTERN DIMENSIONS



DASH NUMBER*

INDUCTANCE (nH) ±10%

INDUCTANCE TEST FREQUENCY (MHz)

Q MINIMUM

Q TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAXIMUM (mA)

SERIES 0805 CERAMIC CORE

-2N8K	2.8	250	80	1500	7900	0.06	800
-3N0K	3.0	250	65	1500	7900	0.06	800
-3N3K	3.3	250	50	1500	6000	0.08	600
-5N6K	5.6	250	65	1000	5500	0.08	600
-6N8K	6.8	250	50	1000	5500	0.11	600
-7N5K	7.5	250	50	1000	4500	0.14	600
-8N2K	8.2	250	50	1000	4700	0.12	600
-10NK	10	250	60	500	4200	0.10	600
-12NK	12	250	50	500	4000	0.15	600
-15NK	15	250	50	500	3400	0.17	600
-18NK	18	250	50	500	3300	0.20	600
-22NK	22	250	55	500	2600	0.22	500
-24NK	24	250	50	500	2000	0.22	500
-27NK	27	250	55	500	2500	0.25	500
-33NK	33	250	60	500	2050	0.27	500
-36NK	36	250	55	500	1700	0.27	500
-39NK	39	250	60	500	2000	0.29	500
-43NK	43	200	60	500	1650	0.34	500
-47NK	47	200	60	500	1650	0.31	500
-56NK	56	200	60	500	1550	0.34	500
-68NK	68	200	60	500	1450	0.38	500
-82NK	82	150	65	500	1300	0.42	400
-91NK	91	150	65	500	1200	0.48	400
-101K	100	150	65	500	1200	0.46	400
-111K	110	150	50	250	1000	0.48	400
-121K	120	150	50	250	1100	0.51	400
-151K	150	100	50	250	920	0.56	400
-181K	180	100	50	250	870	0.64	400
-221K	220	100	50	250	850	0.70	400
-241K	240	100	44	250	690	1.0	350
-271K	270	100	48	250	650	1.0	350
-331K	330	100	48	250	600	1.4	310
-391K	390	100	48	250	560	1.5	290
-471K	470	50	33	100	375	1.7	220
-561K	560	25	23	50	340	1.9	210
-621K	620	25	23	50	220	2.2	210
-681K	680	25	23	50	200	2.2	190
-751K	750	25	23	50	200	2.3	180
-821K	820	25	23	50	200	2.35	180
-102K	1000	25	20	50	100	2.50	170
-122K	1200	7.9	18	25	100	2.50	170
-152K	1500	7.9	16	25	100	2.50	170
-182K	1800	7.9	16	7.9	80	2.50	170
-222K	2200	7.9	16	7.9	60	2.70	160
-272K	2700	7.9	16	7.9	50	2.95	150

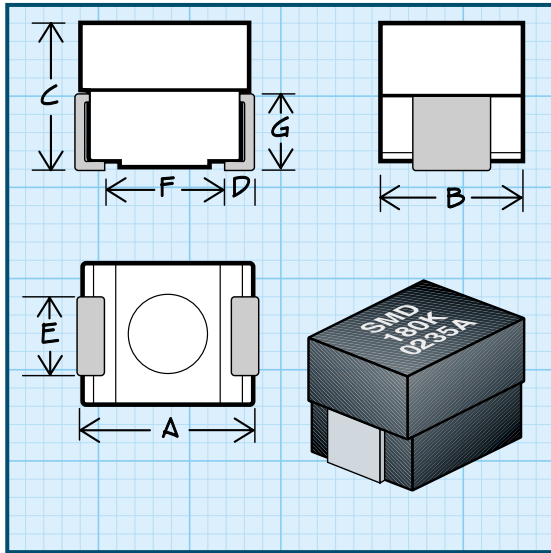
Optional Tolerances: 8.2nH & Lower J = 5%

All Other Values: J = 5% G = 2%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Unshielded Surface Mount Inductors



Physical Parameters

	Inches	Millimeters
A	0.095 to 0.115	2.41 to 2.92
B	0.085 to 0.105	2.16 to 2.66
C	0.075 to 0.095	1.91 to 2.41
D	0.010 to 0.030	0.26 to 0.76
E	0.040 to 0.060	1.02 to 1.52
F	0.060 (Ref. only)	1.52 (Ref. only)
G	0.045 (Ref. only)	1.14 (Ref. only)

Dimensions "A" and "C" are over terminals.

Weight Max. (Grams) 0.1

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C

Phenolic: 0.169 W

Ferrite: 0.208 W

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 7000 pieces max.

Made In the U.S.A. Patent Protected

DASH NUMBER*
INDUCTANCE (µH)
TOLERANCE
Q MINIMUM
TEST FREQUENCY (MHz)
SRF MINIMUM (MHz)
DC RESISTANCE MAXIMUM (OHMS)
CURRENT RATING MAX. (mA)

SERIES 1008 PHENOLIC CORE							
-018M	0.0018	±20%	40	50	2700	0.050	1562
-022M	0.0022	±20%	40	50	2700	0.050	1562
-027M	0.0027	±20%	40	50	2700	0.050	1562
-033M	0.0033	±20%	40	50	2700	0.050	1562
-039M	0.0039	±20%	40	50	2700	0.050	1562
-047M	0.0047	±20%	40	50	2700	0.050	1562
-056M	0.0056	±20%	40	50	2700	0.050	1562
-068M	0.0068	±20%	40	50	2700	0.050	1562
-082M	0.0082	±20%	40	50	2700	0.050	1562
-100K	0.010	±10%	40	50	2700	0.050	1562
-120K	0.012	±10%	40	50	2450	0.058	1450
-150K	0.015	±10%	40	50	2200	0.064	1381
-180K	0.018	±10%	40	50	2000	0.070	1320
-220K	0.022	±10%	35	50	1800	0.080	1235
-270K	0.027	±10%	35	50	1625	0.090	1164
-330K	0.033	±10%	30	50	1450	0.100	1105
-390K	0.039	±10%	30	50	1335	0.110	1053
-470K	0.047	±10%	30	50	1220	0.120	1008
-560K	0.056	±10%	25	50	1110	0.170	847
-680K	0.068	±10%	25	50	1000	0.180	823
-820K	0.082	±10%	25	50	915	0.190	801
-101K	0.100	±10%	15	25	550	0.230	728

SERIES 1008 FERRITE CORE							
-121K	0.12	±10%	40	25	750	0.100	1225
-151K	0.15	±10%	40	25	650	0.110	1168
-181K	0.18	±10%	40	25	550	0.120	1119
-221K	0.22	±10%	40	25	450	0.135	1055
-271K	0.27	±10%	40	25	375	0.150	1000
-331K	0.33	±10%	40	25	300	0.165	954
-391K	0.39	±10%	40	25	250	0.180	913
-471K	0.47	±10%	40	25	215	0.210	846
-561K	0.56	±10%	40	25	195	0.230	808
-681K	0.68	±10%	40	25	175	0.260	760
-821K	0.82	±10%	40	25	140	0.300	708
-102J	1.0	±5%	30	7.9	125	0.320	685
-122J	1.2	±5%	30	7.9	100	0.430	591
-152J	1.5	±5%	30	7.9	92	0.500	548
-182J	1.8	±5%	30	7.9	76	0.720	457
-222J	2.2	±5%	30	7.9	70	0.800	433
-272J	2.7	±5%	30	7.9	62	0.880	413
-332J	3.3	±5%	30	7.9	60	0.950	398
-392J	3.9	±5%	30	7.9	57	1.20	354
-472J	4.7	±5%	30	7.9	47	1.35	334
-562J	5.6	±5%	30	7.9	44	1.54	312
-682J	6.8	±5%	30	7.9	35	2.00	274
-822J	8.2	±5%	30	7.9	33	2.16	264
-103J	10	±5%	30	7.9	28	2.50	245
-123J	12	±5%	30	2.5	24	3.50	207
-153J	15	±5%	30	2.5	21	4.00	194
-183J	18	±5%	30	2.5	19	5.00	173
-223J	22	±5%	30	2.5	17	6.00	158
-273J	27	±5%	30	2.5	15	7.00	146
-333J	33	±5%	30	2.5	13	8.00	135
-393J	39	±5%	30	2.5	12	9.00	125
-473J	47	±5%	30	2.5	11	10.00	120

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

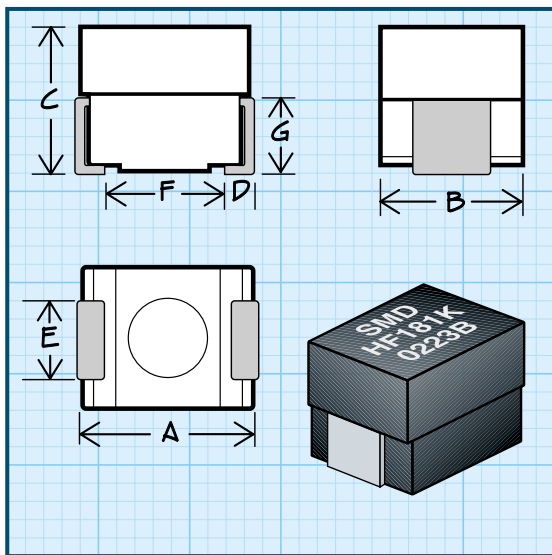
Series HF1008R HF1008

RoHS
Compliant

Traditional
First Quality

Unshielded Surface Mount Inductors

RF INDUCTORS



Physical Parameters

	Inches	Millimeters
A	0.095 to 0.115	2.41 to 2.92
B	0.085 to 0.105	2.16 to 2.66
C	0.075 to 0.095	1.91 to 2.41
D	0.010 to 0.030	0.26 to 0.76
E	0.040 to 0.060	1.02 to 1.52
F	0.060 (Ref. only)	1.52 (Ref. only)
G	0.045 (Ref. only)	1.14 (Ref. only)

Dimensions "A" and "C" are over terminals.

Weight Max. (Grams) 0.1

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C

Non-magnetic: 0.169 W

Ferrite: 0.208 W

Note Consult factory for custom applications

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 7000 pieces max.

Made In the U.S.A. Patent Protected

DASH NUMBER*

INDUCTANCE (nH)

TOLERANCE

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAX. (mA)

SERIES HF1008 NON-MAGNETIC CORE

-047M	4.7	±20%	40	50	>3000	0.070	1320
-082M	8.2	±20%	40	50	>3000	0.075	1275
-100M	10.0	±20%	30	50	>3000	0.080	1235
-120M	12.0	±20%	30	50	2700	0.105	1075
-150M	15.0	±20%	30	50	2400	0.110	1053
-180M	18.0	±20%	30	50	2250	0.130	965
-220M	22.0	±20%	30	50	2000	0.135	950
-270M	27.0	±20%	30	50	1800	0.140	930
-330M	33.0	±20%	30	50	1600	0.150	900
-390M	39.0	±20%	30	50	1500	0.160	870
-470M	47.0	±20%	30	50	1350	0.170	847
-560K	56.0	±10%	20	50	1200	0.370	570
-680K	68.0	±10%	20	50	1050	0.400	550
-820K	82.0	±10%	15	50	1000	0.800	390
-101K	100	±10%	15	25	900	0.850	375

SERIES HF1008 FERRITE CORE

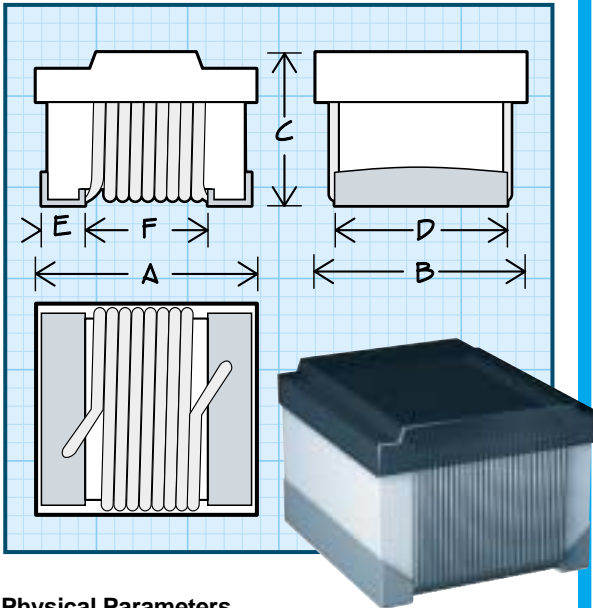
-121K	120	±10%	30	25	850	0.910	405
-151K	150	±10%	30	25	800	0.950	395
-181K	180	±10%	30	25	700	1.05	375
-221K	220	±10%	30	25	600	1.15	360
-271K	270	±10%	30	25	550	1.25	345
-331K	330	±10%	30	25	500	1.35	330
-391K	390	±10%	30	25	465	1.45	320
-471K	470	±10%	30	25	425	1.55	310
-561K	560	±10%	30	25	415	1.65	300
-621K	620	±10%	30	25	375	1.75	290
-681K	680	±10%	30	25	340	1.85	280
-751K	750	±10%	30	25	330	1.95	275
-821K	820	±10%	30	25	325	2.00	273
-911K	910	±10%	30	25	305	2.05	270
-102K	1000	±10%	30	25	290	1.40	325
-122K	1200	±10%	30	7.9	200	1.45	320
-152K	1500	±10%	30	7.9	165	1.50	315
-182K	1800	±10%	30	7.9	150	1.60	305
-222K	2200	±10%	30	7.9	120	1.65	300
-272K	2700	±10%	30	7.9	110	1.80	285
-332K	3300	±10%	30	7.9	60	1.90	280
-392K	3900	±10%	30	7.9	50	1.95	275
-472K	4700	±10%	30	7.9	40	2.00	273

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Wirewound Surface Mount Inductors



Physical Parameters

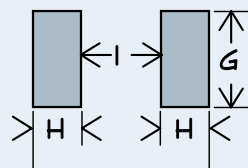
	Inches	Millimeters
A	0.115 Max.	2.92 Max.
B	0.110 Max.	2.79 Max.
C	0.080 Max.	2.03 Max.
D	0.080 (Ref. only)	2.03 (Ref. only)
E	0.020 (Ref. only)	0.50 (Ref. only)
F	0.060 (Ref. only)	1.52 (Ref. only)
G	0.100	2.54
H	0.040	1.01
I	0.050	1.27

Operating Temperature Range -40°C to +125°C

Inductance and Q tested on HP4291A using HP16193A test fixture, or equivalent

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.

LAND PATTERN DIMENSIONS



DASH NUMBER*

INDUCTANCE (nH) ±10%

INDUCTANCE TEST FREQUENCY (MHz)

Q MINIMUM

Q TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE MAXIMUM (Ohms)

CURRENT RATING MAXIMUM (mA)

SERIES WW1008 CERAMIC CORE

-5N6K	5.6	50	50	1500	4000	0.15	1000
-10NK	10	50	50	500	4100	0.08	1000
-12NK	12	50	50	500	3300	0.09	1000
-15NK	15	50	50	500	2500	0.11	1000
-18NK	18	50	50	350	2400	0.12	1000
-22NK	22	50	55	350	2400	0.12	1000
-24NK	24	50	55	350	1900	0.12	1000
-27NK	27	50	55	350	1600	0.13	1000
-33NK	33	50	60	350	1600	0.14	1000
-39NK	39	50	60	350	1500	0.15	1000
-47NK	47	50	65	350	1500	0.16	1000
-56NK	56	50	65	350	1300	0.18	1000
-59NK	59	50	65	350	1250	0.20	1000
-68NK	68	50	65	350	1300	0.20	1000
-75NK	75	50	60	350	1100	0.21	1000
-82NK	82	50	60	350	1000	0.22	1000
-101K	100	25	60	350	1000	0.56	650
-121K	120	25	60	350	950	0.63	650
-151K	150	25	45	100	850	0.70	580
-181K	180	25	45	100	750	0.77	520
-221K	220	25	45	100	700	0.84	500
-241K	240	25	45	100	650	0.88	500
-271K	270	25	45	100	600	0.91	500
-301K	300	25	45	100	585	1.00	450
-331K	330	25	45	100	570	1.05	450
-361K	360	25	45	100	530	1.10	470
-391K	390	25	45	100	500	1.12	470
-431K	430	25	45	100	480	1.15	470
-471K	470	25	45	100	450	1.19	470
-561K	560	25	45	100	415	1.33	400
-621K	620	25	45	100	375	1.40	300
-681K	680	25	45	100	375	1.47	400
-751K	750	25	45	100	360	1.54	360
-821K	820	25	35	100	350	1.61	400
-911K	910	25	35	50	320	1.68	380
-102K	1000	25	35	50	290	1.75	370
-122K	1200	7.9	35	50	250	2.00	310
-152K	1500	7.9	28	50	200	2.30	330
-182K	1800	7.9	28	50	160	2.60	300
-222K	2200	7.9	28	50	160	2.80	280
-272K	2700	7.9	22	25	140	3.20	290
-332K	3300	7.9	22	25	110	3.40	290
-392K	3900	7.9	20	25	100	3.60	260
-472K	4700	7.9	20	25	90	4.00	260
-562K	5600	7.9	16	7.9	40	4.00	240
-682K	6800	7.9	18	7.9	40	4.90	200
-822K	8200	7.9	18	7.9	25	6.00	170
-103K	10000	2.5	18	7.9	20	9.00	150
-123K	12000	2.5	18	7.9	18	10.50	130
-153K	15000	2.5	18	7.9	15	11.50	120

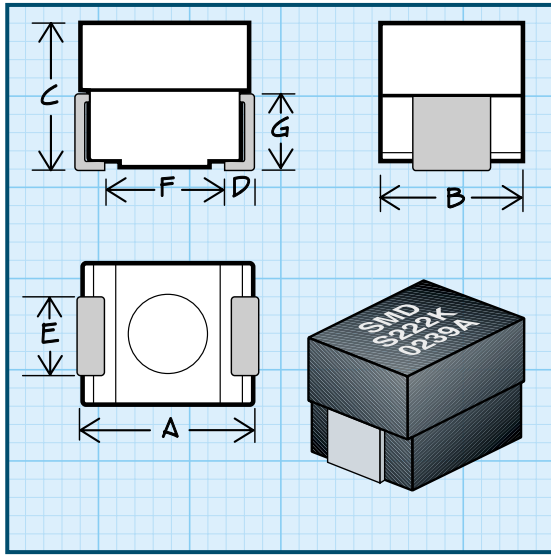
Optional Tolerances: 27nH & Lower J = 5%
 All Other Values: J = 5% G = 2%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Shielded Surface Mount Inductors

RF INDUCTORS



Physical Parameters

	Inches	Millimeters
A	0.095 to 0.115	2.41 to 2.92
B	0.085 to 0.105	2.16 to 2.66
C	0.075 to 0.095	1.91 to 2.41
D	0.010 to 0.030	0.26 to 0.76
E	0.040 to 0.060	1.02 to 1.52
F	0.060 (Ref. only)	1.52 (Ref. only)
G	0.045 (Ref. only)	1.14 (Ref. only)

Dimensions "A" and "C" are over terminals.

Weight Max. (Grams) 0.1

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C 0.157 W

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 7000 pieces max.

Made In the U.S.A. Patent Protected

DASH NUMBER*

INDUCTANCE
(µH) ± 10%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAX. (mA)

SERIES S1008 FERRITE CORE

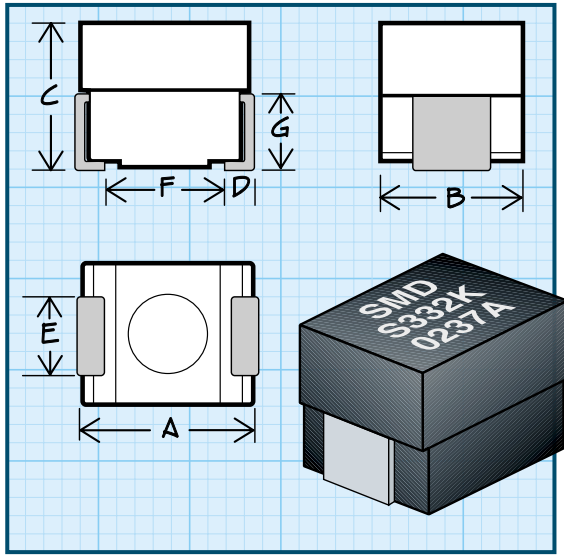
-101K	0.10	40	25	383	0.09	1120
-121K	0.12	40	25	368	0.10	1060
-151K	0.15	40	25	353	0.11	1015
-181K	0.18	40	25	338	0.12	970
-221K	0.22	40	25	323	0.13	930
-271K	0.27	40	25	308	0.14	900
-331K	0.33	40	25	293	0.15	865
-391K	0.39	40	25	278	0.16	840
-471K	0.47	40	25	255	0.17	815
-561K	0.56	40	25	232	0.18	790
-621K	0.62	40	25	200	0.19	770
-681K	0.68	40	25	186	0.20	750
-751K	0.75	40	25	163	0.21	735
-821K	0.82	40	25	140	0.22	715
-911K	0.91	40	25	130	0.24	685
-102K	1.0	30	7.9	120	0.25	670
-122K	1.2	30	7.9	95	0.29	625
-152K	1.5	30	7.9	72	0.42	545
-182K	1.8	30	7.9	66	0.60	435
-222K	2.2	30	7.9	60	0.80	375
-272K	2.7	30	7.9	55	0.85	365
-332K	3.3	30	7.9	50	0.90	355
-392K	3.9	30	7.9	45	1.00	335
-472K	4.7	30	7.9	42	1.20	305
-562K	5.6	30	7.9	40	1.30	295
-682K	6.8	30	7.9	38	1.80	250
-822K	8.2	30	7.9	32	1.90	240
-103K	10	30	7.9	29	2.10	230
-123K	12	30	2.5	28	3.50	220
-153K	15	30	2.5	25	4.00	210
-183K	18	30	2.5	21	5.00	200
-223K	22	30	2.5	18	6.00	170
-273K	27	30	2.5	15	7.00	160
-333K	33	30	2.5	12	7.40	125
-393K	39	30	2.5	10	8.00	120
-473K	47	30	2.5	8	9.00	110

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Shielded Surface Mount Inductors



Physical Parameters

	Inches	Millimeters
A	0.118 to 0.138	3.00 to 3.51
B	0.085 to 0.105	2.16 to 2.66
C	0.081 to 0.101	2.06 to 2.57
D	0.016 Min.	0.41 Min.
E	0.041 to .061	1.04 to 1.55
F	0.070 (Ref. only)	1.78 (Ref. only)
G	0.054 (Ref. only)	1.37 (Ref. only)

Dimensions "A" and "C" are over terminals.

Weight Max. (Grams) 0.1

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C

Iron: 0.266 W

Ferrite: 0.224 W

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 7000 pieces max.

Made In the U.S.A. Patent Protected

***Complete part # must include series # PLUS the dash #**

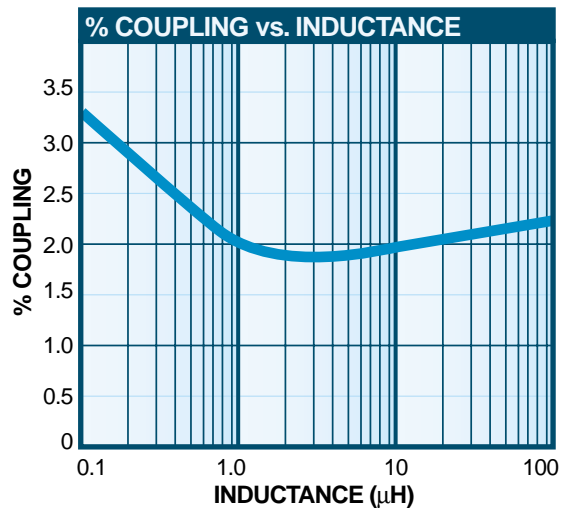
For further surface finish information, refer to **TECHNICAL** section of this catalog.

DASH NUMBER*
INDUCTANCE (μH) ± 10%
Q MINIMUM
TEST FREQUENCY (MHz)
SRF MINIMUM (MHz)
DC RESISTANCE MAXIMUM (OHMS)
CURRENT RATING MAX. (mA)

SERIES S1210 IRON CORE						
-101K	0.10	40	25	375	0.15	1131
-121K	0.12	40	25	350	0.17	1062
-151K	0.15	40	25	330	0.20	979
-181K	0.18	40	25	310	0.22	934
-221K	0.22	40	25	300	0.25	876
-271K	0.27	40	25	290	0.30	800
-331K	0.33	40	25	255	0.35	740
-391K	0.39	40	25	230	0.40	692
-471K	0.47	40	25	220	0.45	653
-561K	0.56	40	25	200	0.50	619
-681K	0.68	40	25	180	0.55	590
-821K	0.82	40	25	170	0.60	565
SERIES S1210 FERRITE CORE						
-102K	1.0	40	7.9	140	0.40	635
-122K	1.2	40	7.9	120	0.49	574
-152K	1.5	40	7.9	110	0.57	532
-182K	1.8	40	7.9	95	0.65	498
-222K	2.2	40	7.9	80	0.73	470
-272K	2.7	40	7.9	70	0.75	464
-332K	3.3	40	7.9	45	0.80	449
-392K	3.9	40	7.9	42	0.83	441
-472K	4.7	40	7.9	40	1.00	402
-562K	5.6	40	7.9	38	1.30	352
-682K	6.8	40	7.9	35	1.50	328
-822K	8.2	40	7.9	32	1.70	308
-103K	10.0	40	2.5	28	1.90	291
-123K	12.0	40	2.5	25	2.10	277
-153K	15.0	40	2.5	23	2.50	254
-183K	18.0	40	2.5	21	2.80	240
-223K	22.0	40	2.5	19	3.00	232
-273K	27.0	40	2.5	16	4.00	201
-333K	33.0	40	2.5	14	4.50	189
-393K	39.0	40	2.5	12	5.00	179
-473K	47.0	40	2.5	10	5.50	171
-563K	56.0	40	2.5	8	6.30	160
-683K	68.0	40	2.5	8	7.00	152
-823K	82.0	40	2.5	8	8.50	137
-104K	100.0	40	2.5	8	10.00	127

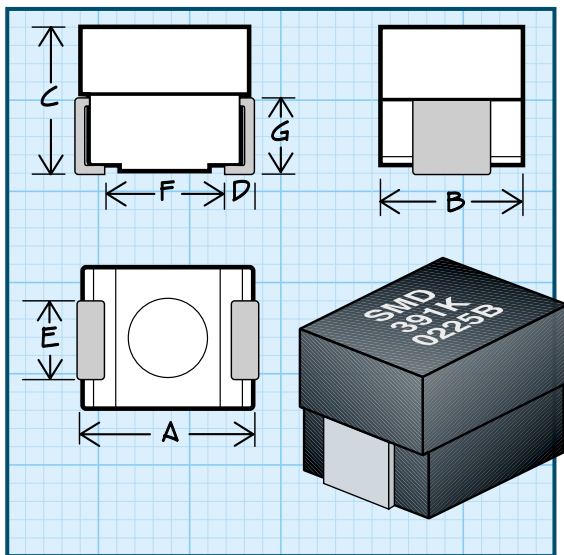
Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

For more detailed graphs, contact factory



RF INDUCTORS

Surface Mount Inductors



Physical Parameters

	Inches	Millimeters
A	0.118 to 0.138	3.00 to 3.51
B	0.085 to 0.105	2.16 to 2.67
C	0.081 to 0.101	2.06 to 2.57
D	0.016 (Min.)	0.41 (Min.)
E	0.041 to 0.061	1.04 to 1.55
F	0.070 (Ref. only)	1.78 (Ref. only)
G	0.054 (Ref. only)	1.37 (Ref. only)

Dimensions "A" and "C" are over terminals

Weight Max. (Grams) 0.1

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C Ambient

Phenolic: 0.168 W

Iron: 0.287 W

Ferrite: 0.287 W

**Note Self Resonant Frequency (SRF) values are calculated and for reference only.

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 7000 pieces max.

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Made In the U.S.A. Patent Protected

DASH NUMBER*

INDUCTANCE (µH)

TOLERANCE

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz) **

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAX. (mA)

SERIES 1210 PHENOLIC CORE

-018M	0.0018	± 20%	40	50.0	2700**	0.050	1562
-022M	0.0022	± 20%	40	50.0	2700**	0.050	1562
-027M	0.0027	± 20%	40	50.0	2700**	0.050	1562
-033M	0.0033	± 20%	40	50.0	2700**	0.050	1562
-039M	0.0039	± 20%	40	50.0	2700**	0.050	1562
-047M	0.0047	± 20%	40	50.0	2700**	0.050	1562
-056M	0.0056	± 20%	40	50.0	2700**	0.050	1562
-068M	0.0068	± 20%	40	50.0	2700**	0.050	1562
-082M	0.0082	± 20%	40	50.0	2700**	0.050	1562
-100K	0.010	± 10%	30	50.0	2000**	0.13	966
-120K	0.012	± 10%	30	50.0	1850**	0.14	931
-150K	0.015	± 10%	30	50.0	1700**	0.16	871
-180K	0.018	± 10%	30	50.0	1550**	0.18	821
-220K	0.022	± 10%	30	50.0	1300**	0.20	779
-270K	0.027	± 10%	30	50.0	1150**	0.22	743
-330K	0.033	± 10%	30	50.0	1000**	0.24	711
-390K	0.039	± 10%	30	50.0	900**	0.27	670
-470K	0.047	± 10%	30	50.0	800**	0.30	636
-560K	0.056	± 10%	30	50.0	750**	0.33	606
-680K	0.068	± 10%	30	50.0	700**	0.36	580
-820K	0.082	± 10%	30	50.0	625**	0.40	551

SERIES 1210 IRON CORE

-101K	0.10	± 10%	30	25.0	550	0.20	1018
-121K	0.12	± 10%	30	25.0	500	0.22	971
-151K	0.15	± 10%	30	25.0	450	0.25	910
-181K	0.18	± 10%	30	25.0	400	0.28	860
-221K	0.22	± 10%	30	25.0	350	0.32	805
-271K	0.27	± 10%	30	25.0	320	0.36	759
-331K	0.33	± 10%	30	25.0	300	0.40	720
-391K	0.39	± 10%	30	25.0	250	0.45	679
-471K	0.47	± 10%	30	25.0	220	0.50	644
-561K	0.56	± 10%	30	25.0	180	0.55	614
-681K	0.68	± 10%	30	25.0	160	0.60	588
-821K	0.82	± 10%	30	25.0	140	0.67	556

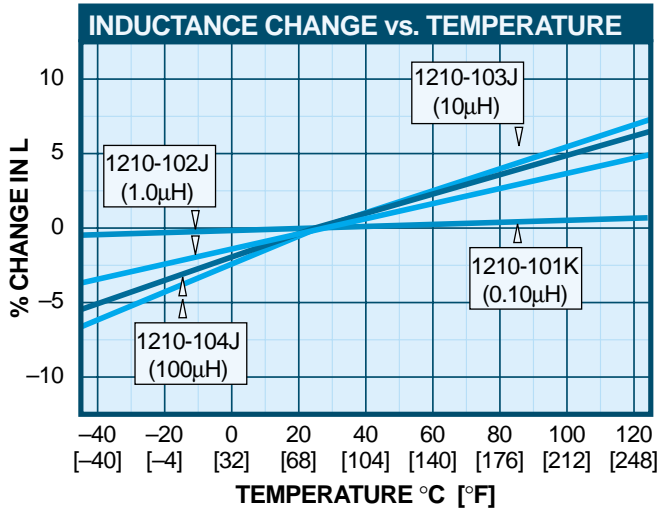
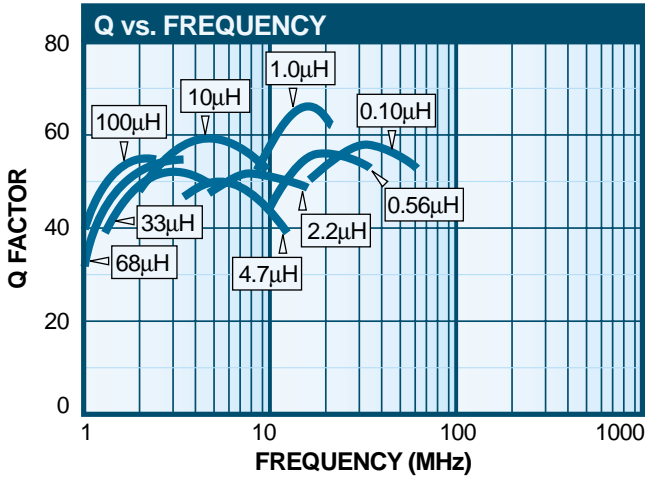
SERIES 1210 FERRITE CORE

-102J	1.0	± 5%	30	7.9	120	0.70	515
-122J	1.2	± 5%	30	7.9	100	0.75	497
-152J	1.5	± 5%	30	7.9	85	0.85	467
-182J	1.8	± 5%	30	7.9	75	0.90	454
-222J	2.2	± 5%	30	7.9	70	1.0	431
-272J	2.7	± 5%	30	7.9	65	1.1	411
-332J	3.3	± 5%	30	7.9	58	1.2	393
-392J	3.9	± 5%	30	7.9	50	1.3	378
-472J	4.7	± 5%	30	7.9	45	1.5	352
-562J	5.6	± 5%	30	7.9	42	1.6	341
-682J	6.8	± 5%	30	7.9	40	1.8	321
-822J	8.2	± 5%	30	7.9	35	2.0	305
-103J	10	± 5%	30	7.9	30	2.1	297
-123J	12	± 5%	30	2.5	28	2.5	272
-153J	15	± 5%	30	2.5	25	2.8	257
-183J	18	± 5%	30	2.5	23	3.3	237
-223J	22	± 5%	30	2.5	20	3.7	224
-273J	27	± 5%	30	2.5	18	5.0	193
-333J	33	± 5%	30	2.5	15	5.6	182
-393J	39	± 5%	30	2.5	14	6.4	170
-473J	47	± 5%	30	2.5	13	7.0	163
-563J	56	± 5%	30	2.5	11	8.0	152
-683J	68	± 5%	30	2.5	10	9.0	144
-823J	82	± 5%	30	2.5	9	10.0	136
-104J	100	± 5%	30	2.5	8	13.0	120

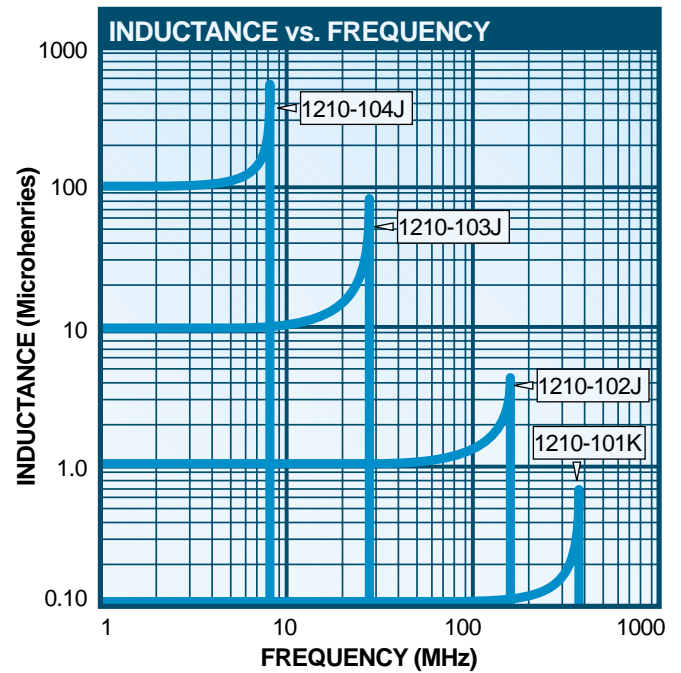
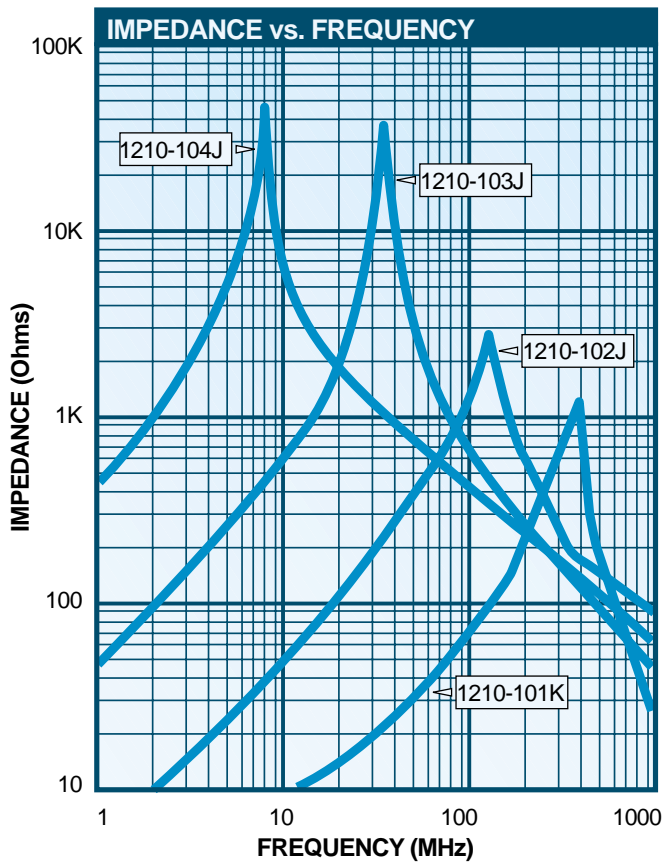
Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

Series 1210

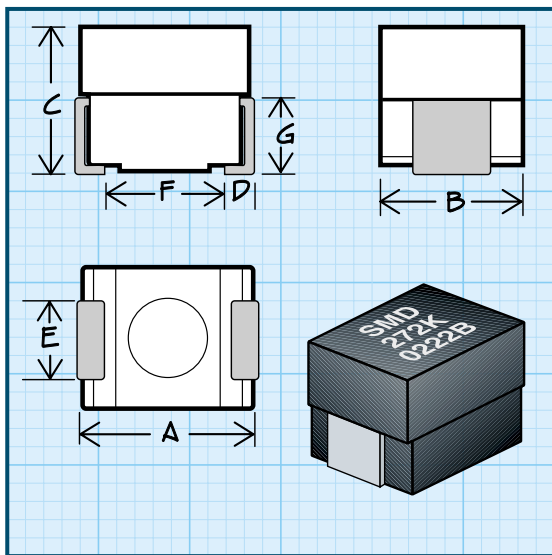
Performance Graphs



For more detailed graphs, contact factory



Temperature Stable
Surface Mount Inductors



Temperature Stable for critical conditions

Physical Parameters

	Inches	Millimeters
A	0.095 to 0.115	2.41 to 2.92
B	0.085 to 0.105	2.16 to 2.66
C	0.075 to 0.095	1.91 to 2.41
D	0.010 to 0.030	0.26 to 0.76
E	0.040 to 0.060	1.02 to 1.52
F	0.060 (Ref. only)	1.52 (Ref. only)
G	0.045 (Ref. only)	1.14 (Ref. only)

Dimensions "A" and "C" are over terminals.

Weight Max. (Grams) 0.1

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C 0.208 W

Note For applications requiring improved characteristics over typical ferrite core inductors of the same size. See 1008 Series (page 13) for values lower than 0.12μH.

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 7000 pieces max.

Made in the U.S.A. Patent Protected

DASH NUMBER*

INDUCTANCE
(μH) ±10%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAX. (mA)

SERIES 4302 POWDERED IRON CORE

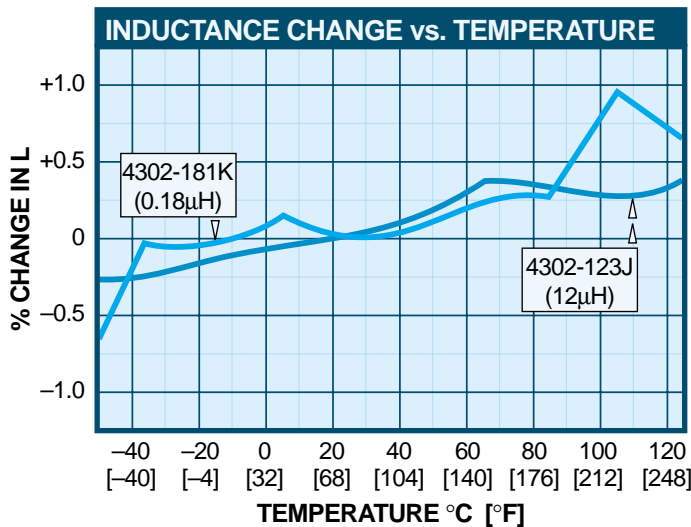
-121K	0.12	40	25.0	400	0.130	1075
-151K	0.15	40	25.0	375	0.150	1000
-181K	0.18	40	25.0	325	0.165	955
-221K	0.22	40	25.0	270	0.175	925
-271K	0.27	40	25.0	240	0.190	890
-331K	0.33	40	25.0	180	0.200	865
-391K	0.39	40	25.0	160	0.220	825
-471K	0.47	40	25.0	130	0.240	790
-561K	0.56	40	25.0	115	0.295	710
-681K	0.68	40	25.0	105	0.320	685
-821K	0.82	40	25.0	95	0.510	540
-102K	1.0	30	7.9	80	0.550	520
-122K	1.2	30	7.9	75	0.600	500
-152K	1.5	30	7.9	70	0.730	455
-182K	1.8	30	7.9	60	0.800	430
-222K	2.2	30	7.9	50	1.25	345
-272K	2.7	30	7.9	45	1.60	305
-332K	3.3	30	7.9	40	1.85	285
-392K	3.9	30	7.9	35	2.10	265
-472K	4.7	30	7.9	30	2.30	255
-562K	5.6	30	7.9	26	3.00	225
-682K	6.8	30	7.9	22	3.50	205
-822K	8.2	30	7.9	20	4.00	195
-103K	10.0	30	7.9	18	4.50	180
-123K	12.0	20	2.5	16	7.50	140
-153K	15.0	20	2.5	14	9.00	125
-183K	18.0	20	2.5	12	11.00	115
-223K	22.0	20	2.5	11	12.00	110
-273K	27.0	20	2.5	10	13.00	105

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

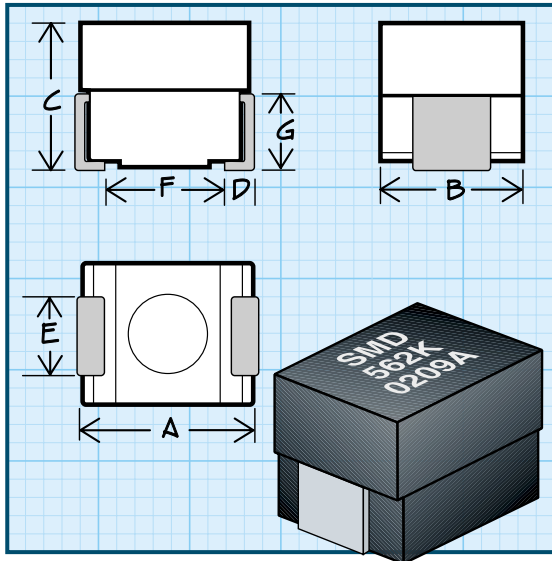
*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

For more detailed graphs, contact factory



Temperature Stable
Surface Mount Inductors



Temperature Stable for critical conditions

Physical Parameters

	Inches	Millimeters
A	0.118 to 0.138	3.00 to 3.51
B	0.085 to 0.105	2.16 to 2.67
C	0.081 to 0.101	2.06 to 2.57
D	0.016 Min.	0.41 Min.
E	0.041 to 0.061	1.04 to 1.55
F	0.070 (Ref. Only)	1.78 (Ref. Only)
G	0.054 (Ref. Only)	1.37 (Ref. Only)

Dimensions "A" and "C" are over terminals.

Weight Max. (Grams) 0.1

Operating Temperature -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C Ambient

Phenolic: 0.168 W

Iron: 0.287 W

Note For applications requiring improved characteristics over typical ferrite core inductors of the same size, see 1210 Series (page 18) for values lower than 0.10µH.

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 7000 pieces max.

Made in the U.S.A. Patent Protected

DASH NUMBER*

INDUCTANCE
(µH) ±10%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAX. (mA)

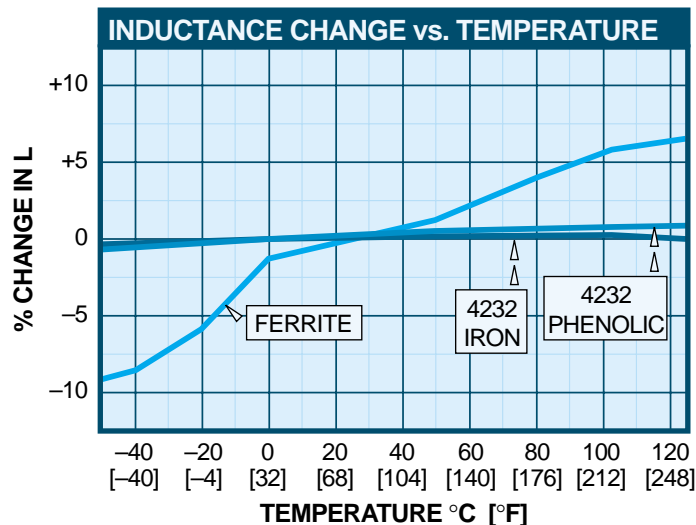
SERIES 4232 PHENOLIC CORE						
-101K	0.10	20	25	250	0.45	519
-121K	0.12	20	25	220	0.50	493
-151K	0.15	20	25	180	0.54	474
-181K	0.18	19	25	165	0.61	446
-221K	0.22	19	25	135	0.68	442
-271K	0.27	17	25	120	0.72	410
-331K	0.33	17	25	200	0.76	400
-391K	0.39	17	25	180	0.84	380
-471K	0.47	17	25	140	0.92	363
-561K	0.56	15	25	120	1.06	338
-681K	0.68	15	25	110	1.25	312
-821K	0.82	10	25	100	1.40	294
-102K	1.0	10	25	90	1.50	284
SERIES 4232 IRON CORE						
-122K	1.2	30	7.9	83	0.90	480
-152K	1.5	30	7.9	75	1.00	455
-182K	1.8	30	7.9	65	1.10	434
-222K	2.2	30	7.9	55	1.20	416
-272K	2.7	30	7.9	50	1.25	407
-332K	3.3	30	7.9	47	1.30	399
-392K	3.9	30	7.9	45	1.40	385
-472K	4.7	30	7.9	40	1.80	339
-562K	5.6	30	7.9	36	2.00	322
-682K	6.8	30	7.9	22	2.40	294
-822K	8.2	30	7.9	21	3.00	263
-103K	10.0	30	7.9	20	4.30	220
-123K	12.0	30	2.5	18	5.80	189
-153K	15.0	30	2.5	17	6.50	179
-183K	18.0	30	2.5	16	7.20	170
-223K	22.0	30	2.5	15	8.00	161
-273K	27.0	30	2.5	14	8.80	153
-333K	33.0	30	2.5	13	9.20	150
-393K	39.0	30	2.5	12	10.8	139
-473K	47.0	30	2.5	10	11.4	135

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

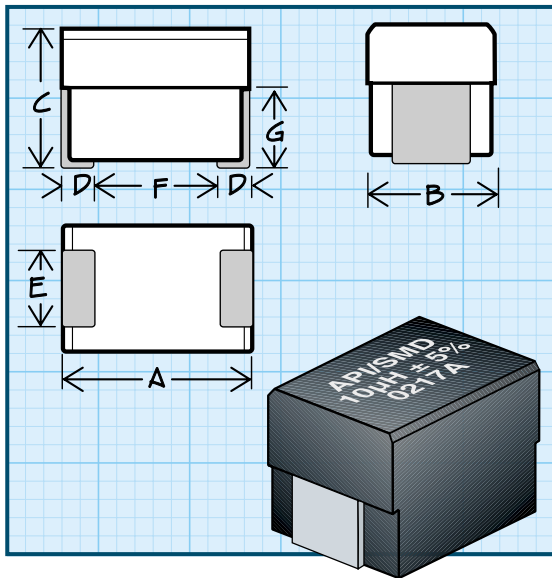
For further surface finish information,
refer to TECHNICAL section of this catalog.

For more detailed graphs, contact factory



Unshielded Surface Mount Inductors

RF INDUCTORS



Physical Parameters

	Inches	Millimeters
A	0.166 to 0.190	4.22 to 4.83
B	0.118 to 0.134	3.00 to 3.40
C	0.118 to 0.134	3.00 to 3.40
D	0.015 Min.	0.38 Min.
E	0.054 to 0.078	1.37 to 1.98
F	0.118 (Ref. only)	3.00 (Ref. only)
G	0.066 (Ref. only)	1.68 (Ref. only)

Dimensions "A" and "C" are over terminals

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C

Iron and Ferrite: 0.278 W

Phenolic: 0.210 W

*** Note** Self Resonant Frequency (SRF) values are calculated and for reference only.

Packaging Tape & reel (12mm): 7" reel, 650 pieces max.; 13" reel, 2500 pieces max.

***Complete part # must include series # PLUS the dash #**

For further surface finish information, refer to TECHNICAL section of this catalog.

Made In the U.S.A. Patent Protected

DASH NUMBER*

INDUCTANCE (µH)

TOLERANCE

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz) *

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAX. (mA)

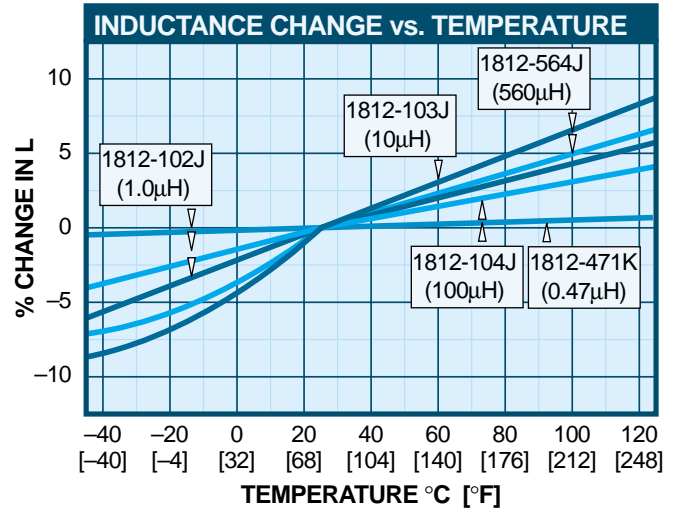
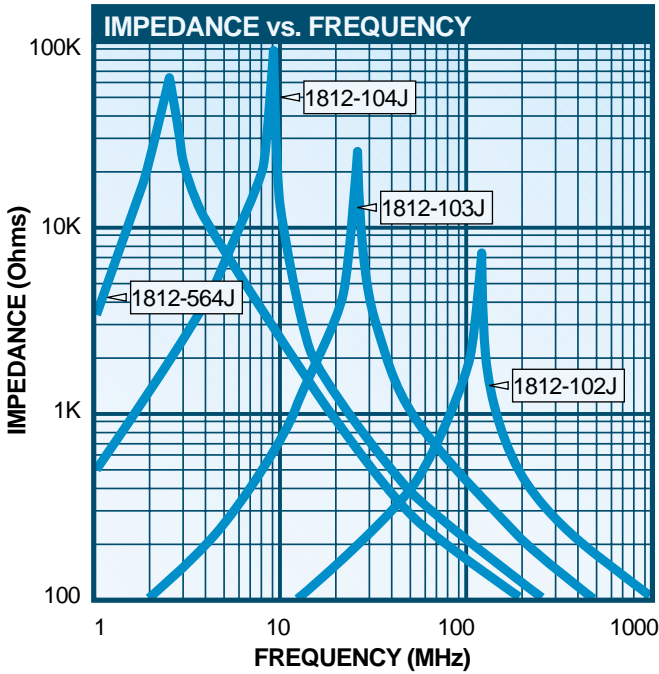
SERIES 1812 PHENOLIC CORE							
-100M	0.010	±20%	40	50	1000*	0.10	1230
-120M	0.012	±20%	40	50	1000*	0.10	1230
-150M	0.015	±20%	40	50	1000*	0.10	1230
-180M	0.018	±20%	40	50	1000*	0.10	1230
-220M	0.022	±20%	40	50	1000*	0.10	1230
-270M	0.027	±20%	40	50	1000*	0.15	1000
-330M	0.033	±20%	40	50	1000*	0.15	1000
-390M	0.039	±20%	30	50	1000*	0.20	870
-470M	0.047	±20%	30	50	1000*	0.20	870
-560M	0.056	±20%	30	50	850*	0.25	770
-680M	0.068	±20%	25	50	750*	0.25	770
-820M	0.082	±20%	25	50	750*	0.25	700

SERIES 1812 IRON CORE							
-101K	0.10	±10%	30	25	650	0.30	818
-121K	0.12	±10%	30	25	600	0.30	818
-151K	0.15	±10%	30	25	500	0.30	818
-181K	0.18	±10%	30	25	400	0.35	757
-221K	0.22	±10%	30	25	350	0.40	708
-271K	0.27	±10%	30	25	300	0.45	668
-331K	0.33	±10%	30	25	250	0.55	604
-391K	0.39	±10%	30	25	220	0.70	535
-471K	0.47	±10%	30	25	190	0.80	501
-561K	0.56	±10%	30	25	170	1.20	409
-681K	0.68	±10%	30	25	150	1.40	379
-821K	0.82	±10%	30	25	140	1.60	354

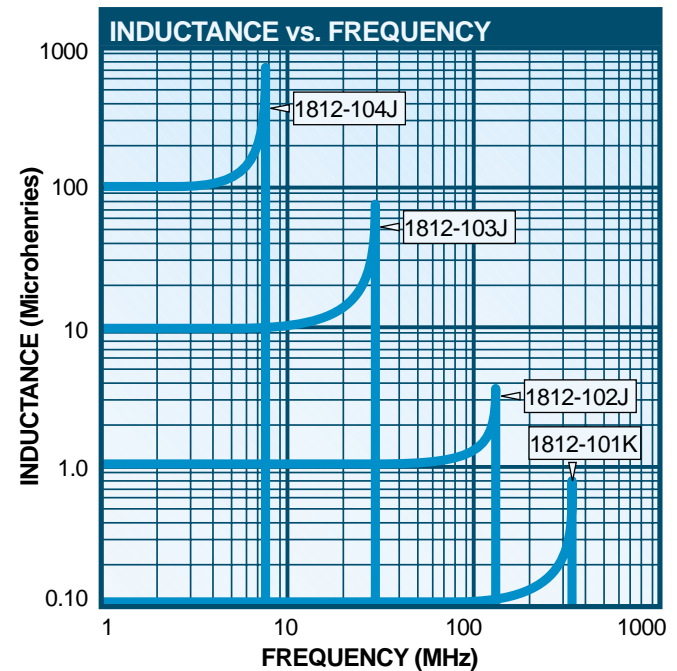
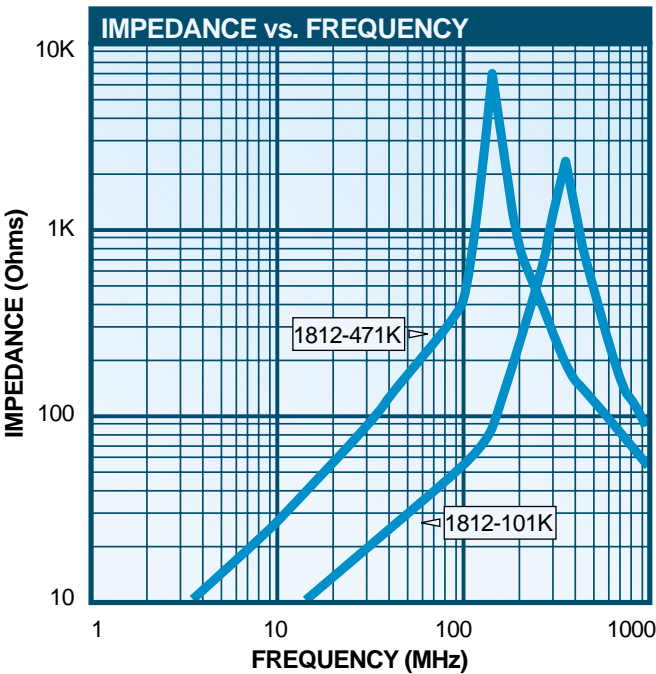
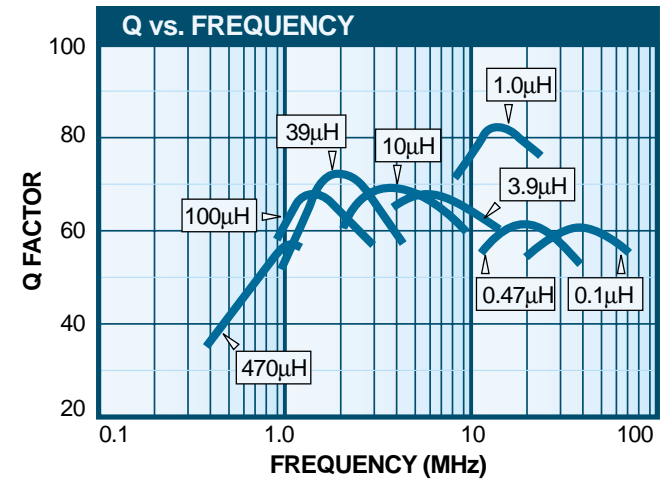
SERIES 1812 FERRITE CORE							
-102J	1.0	±5%	50	7.9	100	0.50	634
-122J	1.2	±5%	50	7.9	80	0.55	604
-152J	1.5	±5%	50	7.9	70	0.60	578
-182J	1.8	±5%	50	7.9	60	0.65	556
-222J	2.2	±5%	50	7.9	55	0.70	535
-272J	2.7	±5%	50	7.9	50	0.75	517
-332J	3.3	±5%	50	7.9	45	0.80	501
-392J	3.9	±5%	50	7.9	40	0.90	472
-472J	4.7	±5%	50	7.9	35	1.00	448
-562J	5.6	±5%	50	7.9	33	1.10	427
-682J	6.8	±5%	50	7.9	27	1.20	409
-822J	8.2	±5%	50	7.9	25	1.40	375
-103J	10	±5%	50	7.9	20	1.60	354
-123J	12	±5%	50	2.5	18	2.00	317
-153J	15	±5%	50	2.5	17	2.50	283
-183J	18	±5%	50	2.5	15	2.80	268
-223J	22	±5%	50	2.5	13	3.20	250
-273J	27	±5%	50	2.5	12	3.60	236
-333J	33	±5%	50	2.5	11	4.00	224
-393J	39	±5%	50	2.5	10	4.50	211
-473J	47	±5%	50	2.5	10	5.00	200
-563J	56	±5%	50	2.5	9	5.50	191
-683J	68	±5%	50	2.5	9	6.00	183
-823J	82	±5%	50	2.5	8	7.00	169
-104J	100	±5%	50	2.5	8	8.00	158
-124J	120	±5%	40	0.79	6	8.0	158
-154J	150	±5%	40	0.79	6	9.0	149
-184J	180	±5%	40	0.79	5	9.5	145
-224J	220	±5%	40	0.79	4	10.0	142
-274J	270	±5%	40	0.79	4	12.0	129
-334J	330	±5%	40	0.79	3.5	14.0	120
-394J	390	±5%	40	0.79	3.0	20.0	100
-474J	470	±5%	40	0.79	3.0	26.0	88
-564J	560	±5%	30	0.79	3.0	30.0	82
-684J	680	±5%	30	0.79	3.0	30.0	82
-824J	820	±5%	30	0.79	2.5	45.0	67
-105J	1000	±5%	30	0.79	2.5	60.0	55

Optional Tolerances: K = 10% J = 5% H = 3% G = 2% F = 1%

Performance Graphs



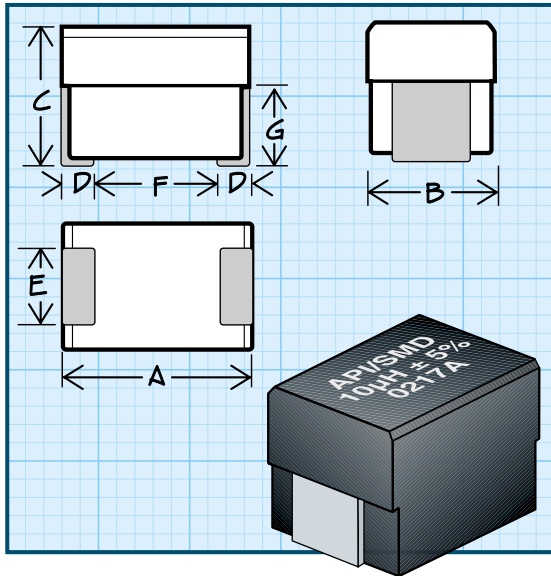
For more detailed graphs, contact factory



Series MIL1812R MIL1812

MILITARY QPL APPROVED

Unshielded Surface Mount Inductors



Military QPL Approvals

M83446/39

* Suffix F: Tin/Lead Termination

* Suffix P: ROHS Compliant

Physical Parameters

	Inches	Millimeters
A	0.166 to 0.190	4.22 to 4.83
B	0.118 to 0.134	3.00 to 3.40
C	0.118 to 0.134	3.00 to 3.40
D	0.015 Min.	0.38 Min.
E	0.054 to 0.078	1.37 to 1.98
F	0.118 (Ref. only)	3.00 (Ref. only)
G	0.066 (Ref. only)	1.68 (Ref. only)

Dimensions "A" and "C" are over terminals

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C

Iron and Ferrite: 0.278 W

Phenolic: 0.210 W

****†Note** Self Resonant Frequency (SRF) values are calculated and for reference only.

Packaging Tape & reel (12mm): 7" reel, 650 pieces max.; 13" reel, 2500 pieces max.

* Termination Finish Options (Part & Callout)

MIL1812 - 101K = M83446/30F (Tin/Lead)

MIL1812R - 101K = M83446/13P (Pb free)

****Complete part # must include series # PLUS the dash #**

For further surface finish information, refer to TECHNICAL section of this catalog.

Made In the U.S.A. Patent Protected

DASH NUMBER**
MIL DASH*
INDUCTANCE (µH)
TOLERANCE
Q MINIMUM
TEST FREQUENCY (MHz)
SRF MINIMUM (MHz)**†
DC RESISTANCE MAXIMUM (OHMS)
CURRENT RATING MAX. (mA)

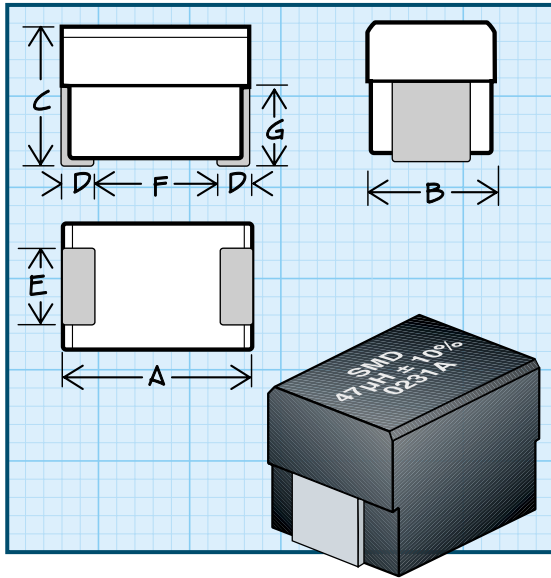
M83446/39 PHENOLIC CORE								
-100M	-01*	0.010	±20%	40	50	1000**†	0.10	1230
-120M	-02*	0.012	±20%	40	50	1000**†	0.10	1230
-150M	-03*	0.015	±20%	40	50	1000**†	0.10	1230
-180M	-04*	0.018	±20%	40	50	1000**†	0.10	1230
-220M	-05*	0.022	±20%	40	50	1000**†	0.10	1230
-270M	-06*	0.027	±20%	40	50	1000**†	0.15	1000
-330M	-07*	0.033	±20%	40	50	1000**†	0.15	1000
-390M	-08*	0.039	±20%	30	50	1000**†	0.20	870
-470M	-09*	0.047	±20%	30	50	1000**†	0.20	870
-560M	-10*	0.056	±20%	30	50	850**†	0.25	770
-680M	-11*	0.068	±20%	25	50	750**†	0.25	770
-820M	-12*	0.082	±20%	25	50	750**†	0.25	700

M83446/39 IRON CORE								
-101K	-13*	0.10	±10%	30	25	650**†	0.30	818
-121K	-14*	0.12	±10%	30	25	600**†	0.30	818
-151K	-15*	0.15	±10%	30	25	500**†	0.30	818
-181K	-16*	0.18	±10%	30	25	400**†	0.35	757
-221K	-17*	0.22	±10%	30	25	350**†	0.40	708
-271K	-18*	0.27	±10%	30	25	300**†	0.45	668
-331K	-19*	0.33	±10%	30	25	250	0.55	604
-391K	-20*	0.39	±10%	30	25	220	0.70	535
-471K	-21*	0.47	±10%	30	25	190	0.80	501
-561K	-22*	0.56	±10%	30	25	170	1.20	409
-681K	-23*	0.68	±10%	30	25	150	1.40	379
-821K	-24*	0.82	±10%	30	25	140	1.60	354

M83446/39 FERRITE CORE								
-102J	-25*	1.0	±5%	50	7.9	100	0.50	634
-122J	-26*	1.2	±5%	50	7.9	80	0.55	604
-152J	-27*	1.5	±5%	50	7.9	70	0.60	578
-182J	-28*	1.8	±5%	50	7.9	60	0.65	556
-222J	-29*	2.2	±5%	50	7.9	55	0.70	535
-272J	-30*	2.7	±5%	50	7.9	50	0.75	517
-332J	-31*	3.3	±5%	50	7.9	45	0.80	501
-392J	-32*	3.9	±5%	50	7.9	40	0.90	472
-472J	-33*	4.7	±5%	50	7.9	35	1.00	448
-562J	-34*	5.6	±5%	50	7.9	33	1.10	427
-682J	-35*	6.8	±5%	50	7.9	27	1.20	409
-822J	-36*	8.2	±5%	50	7.9	25	1.40	375
-103J	-37*	10	±5%	50	7.9	20	1.60	354
-123J	-38*	12	±5%	50	2.5	18	2.00	317
-153J	-39*	15	±5%	50	2.5	17	2.50	283
-183J	-40*	18	±5%	50	2.5	15	2.80	268
-223J	-41*	22	±5%	50	2.5	13	3.20	250
-273J	-42*	27	±5%	50	2.5	12	3.60	236
-333J	-43*	33	±5%	50	2.5	11	4.00	224
-393J	-44*	39	±5%	50	2.5	10	4.50	211
-473J	-45*	47	±5%	50	2.5	10	5.00	200
-563J	-46*	56	±5%	50	2.5	9	5.50	191
-683J	-47*	68	±5%	50	2.5	9	6.00	183
-823J	-48*	82	±5%	50	2.5	8	7.00	169
-104J	-49*	100	±5%	50	2.5	8	8.00	158
-124J	-50*	120	±5%	40	0.79	6	8.0	158
-154J	-51*	150	±5%	40	0.79	6	9.0	149
-184J	-52*	180	±5%	40	0.79	5	9.5	145
-224J	-53*	220	±5%	40	0.79	4	10.0	142
-274J	-54*	270	±5%	40	0.79	4	12.0	129
-334J	-55*	330	±5%	40	0.79	3.5	14.0	120
-394J	-56*	390	±5%	40	0.79	3.0	20.0	100
-474J	-57*	470	±5%	40	0.79	3.0	26.0	88
-564J	-58*	560	±5%	30	0.79	3.0	30.0	82
-684J	-59*	680	±5%	30	0.79	3.0	30.0	82
-824J	-60*	820	±5%	30	0.79	2.5	45.0	67
-105J	-61*	1000	±5%	30	0.79	2.5	60.0	55

Parts listed above are QPL/MIL qualified

Shielded Surface Mount Inductors



Physical Parameters

	Inches	Millimeters
A	0.166 to 0.190	4.2 to 4.8
B	0.118 to 0.134	3.0 to 3.4
C	0.118 to 0.134	3.0 to 3.4
D	0.015 Min.	0.38 Min.
E	0.054 to 0.078	1.37 to 1.98
F	0.118 (Ref. only)	3.0 (Ref. only)
G	0.066 (Ref. only)	1.7 (Ref. only)

Dimensions "A" and "C" are over terminals

Weight Max. (Grams) 0.15

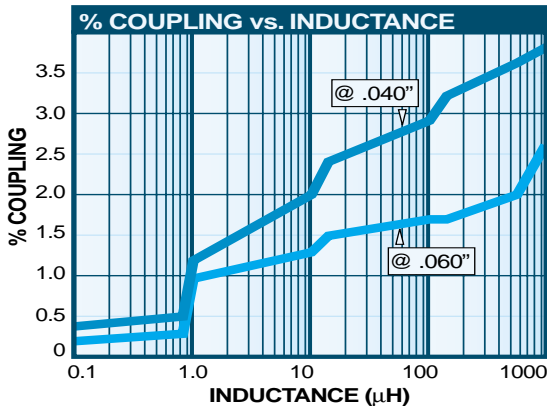
Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C 0.278 W

Packaging Tape & reel (12mm): 7" reel, 650 pieces max.; 13" reel, 2500 pieces max.

Made In the U.S.A. Patent Protected



For more detailed graphs, contact factory

DASH NUMBER*

INDUCTANCE (uH) ±10%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DCR RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAX. (mA)

SERIES S1812 IRON CORE

-101K	0.10	50	25	460	0.09	1490
-121K	0.12	50	25	400	0.10	1412
-151K	0.15	50	25	390	0.11	1347
-181K	0.18	50	25	350	0.12	1290
-221K	0.22	50	25	310	0.15	1154
-271K	0.27	50	25	280	0.18	1053
-331K	0.33	40	25	240	0.22	952
-391K	0.39	40	25	215	0.26	876
-471K	0.47	40	25	205	0.31	802
-561K	0.56	40	25	185	0.37	735
-681K	0.68	40	25	166	0.44	675
-821K	0.82	40	25	155	0.53	614

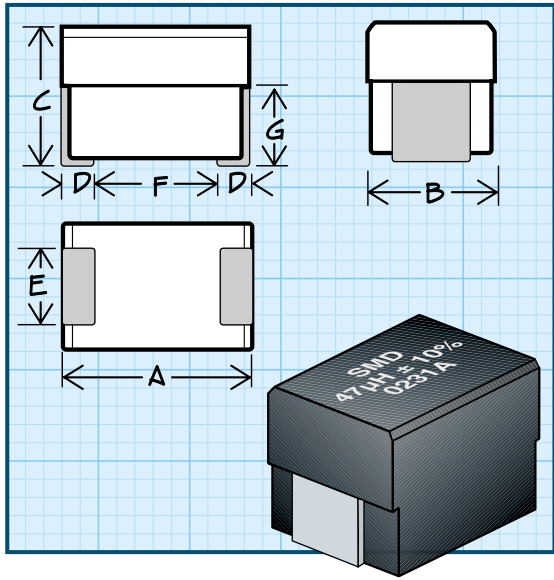
SERIES S1812 FERRITE CORE

-102K	1.0	40	7.9	160	0.35	755
-122K	1.2	40	7.9	140	0.38	725
-152K	1.5	40	7.9	110	0.40	706
-182K	1.8	40	7.9	100	0.43	681
-222K	2.2	40	7.9	90	0.46	658
-272K	2.7	40	7.9	67	0.49	638
-332K	3.3	40	7.9	61	0.70	534
-392K	3.9	40	7.9	56	0.84	487
-472K	4.7	40	7.9	50	0.90	471
-562K	5.6	40	7.9	40	1.00	447
-682K	6.8	40	7.9	32	1.20	408
-822K	8.2	40	7.9	30	1.44	372
-103K	10	50	2.5	25	1.80	333
-123K	12	50	2.5	22	2.00	315
-153K	15	50	2.5	18	2.20	301
-183K	18	50	2.5	15	2.40	288
-223K	22	50	2.5	14	2.60	277
-273K	27	50	2.5	13	2.80	267
-333K	33	50	2.5	12	3.00	258
-393K	39	50	2.5	11	3.20	250
-473K	47	50	2.5	9.0	3.40	242
-563K	56	50	2.5	8.0	3.60	235
-683K	68	50	2.5	7.6	4.30	215
-823K	82	50	2.5	7.2	5.20	196
-104K	100	40	0.79	7.0	7.00	169
-124K	120	40	0.79	6.0	7.50	163
-154K	150	40	0.79	5.0	8.00	158
-184K	180	40	0.79	4.5	8.50	153
-224K	220	40	0.79	4.2	9.00	149
-274K	270	40	0.79	4.0	11.0	135
-334K	330	40	0.79	3.7	12.0	129
-394K	390	40	0.79	3.5	18.0	105
-474K	470	40	0.79	3.3	24.0	91
-564K	560	40	0.79	2.8	28.0	84
-684K	680	40	0.79	2.6	32.0	79
-824K	820	40	0.79	2.2	40.0	71
-105K	1000	40	0.79	2.0	55.0	60

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

Series MILS1812R MILS1812

Shielded Surface Mount Inductors



Military QPL Approvals

M83446/40

* Suffix F: Tin/Lead Termination

* Suffix P: ROHS Compliant

Physical Parameters

	Inches	Millimeters
A	0.166 to 0.190	4.2 to 4.8
B	0.118 to 0.134	3.0 to 3.4
C	0.118 to 0.134	3.0 to 3.4
D	0.015 Min.	0.38 Min.
E	0.054 to 0.078	1.37 to 1.98
F	0.118 (Ref. only)	3.0 (Ref. only)
G	0.066 (Ref. only)	1.7 (Ref. only)

Dimensions "A" and "C" are over terminals

Weight Max. (Grams) 0.15

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C 0.278 W

****†Note** Self Resonant Frequency (SRF) values are calculated and for reference only.

Packaging Tape & reel (12mm): 7" reel, 650 pieces max.; 13" reel, 2500 pieces max.

* **Termination Finish Options** (Part & Callout)

MILS1812 - 101K = M83446/30F (Tin/Lead)

MILS1812R - 101K = M83446/13P (Pb free)

Parts listed are QPL/MIL qualified

****Complete part # must include series # PLUS the dash #**

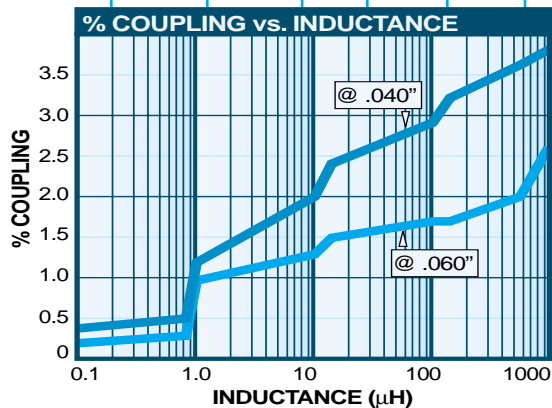
For further surface finish information, refer to TECHNICAL section of this catalog.

Made In the U.S.A. Patent Protected

DASH NUMBER**	MIL DASH*	INDUCTANCE (μH) ±10%	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DCR RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAX. (mA)
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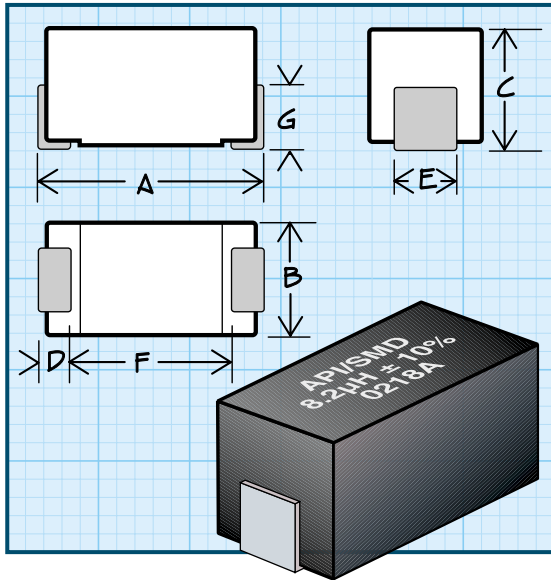
M83446/40 IRON CORE							
-101K	-01*	0.10	50	25	460**†	0.09	1490
-121K	-02*	0.12	50	25	400**†	0.10	1412
-151K	-03*	0.15	50	25	390**†	0.11	1347
-181K	-04*	0.18	50	25	350**†	0.12	1290
-221K	-05*	0.22	50	25	310**†	0.15	1154
-271K	-06*	0.27	50	25	280**†	0.18	1053
-331K	-07*	0.33	40	25	240	0.22	952
-391K	-08*	0.39	40	25	215	0.26	876
-471K	-09*	0.47	40	25	205	0.31	802
-561K	-10*	0.56	40	25	185	0.37	735
-681K	-11*	0.68	40	25	166	0.44	675
-821K	-12*	0.82	40	25	155	0.53	614

M83446/40 FERRITE CORE							
-102K	-13*	1.0	40	7.9	160	0.35	755
-122K	-14*	1.2	40	7.9	140	0.38	725
-152K	-15*	1.5	40	7.9	110	0.40	706
-182K	-16*	1.8	40	7.9	100	0.43	681
-222K	-17*	2.2	40	7.9	90	0.46	658
-272K	-18*	2.7	40	7.9	67	0.49	638
-332K	-19*	3.3	40	7.9	61	0.70	534
-392K	-20*	3.9	40	7.9	56	0.84	487
-472K	-21*	4.7	40	7.9	50	0.90	471
-562K	-22*	5.6	40	7.9	40	1.00	447
-682K	-23*	6.8	40	7.9	32	1.20	408
-822K	-24*	8.2	40	7.9	30	1.44	372
-103K	-25*	10	50	2.5	25	1.80	333
-123K	-26*	12	50	2.5	22	2.00	315
-153K	-27*	15	50	2.5	18	2.20	301
-183K	-28*	18	50	2.5	15	2.40	288
-223K	-29*	22	50	2.5	14	2.60	277
-273K	-30*	27	50	2.5	13	2.80	267
-333K	-31*	33	50	2.5	12	3.00	258
-393K	-32*	39	50	2.5	11	3.20	250
-473K	-33*	47	50	2.5	9.0	3.40	242
-563K	-34*	56	50	2.5	8.0	3.60	235
-683K	-35*	68	50	2.5	7.6	4.30	215
-823K	-36*	82	50	2.5	7.2	5.20	196
-104K	-37*	100	40	0.79	7.0	7.00	169
-124K	-38*	120	40	0.79	6.0	7.50	163
-154K	-39*	150	40	0.79	5.0	8.00	158
-184K	-40*	180	40	0.79	4.5	8.50	153
-224K	-41*	220	40	0.79	4.2	9.00	149
-274K	-42*	270	40	0.79	4.0	11.0	135
-334K	-43*	330	40	0.79	3.7	12.0	129
-394K	-44*	390	40	0.79	3.5	18.0	105
-474K	-45*	470	40	0.79	3.3	24.0	91
-564K	-46*	560	40	0.79	2.8	28.0	84
-684K	-47*	680	40	0.79	2.6	32.0	79
-824K	-48*	820	40	0.79	2.2	40.0	71
-105K	-49*	1000	40	0.79	2.0	55.0	60



For more detailed graphs, contact factory

Unshielded Surface Mount Inductors



Physical Parameters

	Inches	Millimeters
A	0.300 to 0.325	7.62 to 8.26
B	0.105 to 0.125	2.67 to 3.18
C	0.125 to 0.145	3.18 to 3.68
D	0.020 Min.	0.508 Min
E	0.040 to 0.060	1.02 to 1.52
F	0.190 (Ref. only)	4.83 (Ref. only)
G	0.070 (Ref. only)	1.78 (Ref. only)

Weight Max (Grams) 0.30

Operating Temperature Range

Phenolic: -55°C to +125°C
Iron and Ferrite: -55°C to +105°C

Current Rating at 90°C Ambient

Phenolic: 35°C Rise
Iron and Ferrite: 15°C Rise

Maximum Power Dissipation at 90°C Ambient

Phenolic: 0.210 W
Iron: 0.090 W
Ferrite: 0.073 W

Packaging Tape & reel (16mm): 7" reel, 500 pieces max.; 13" reel, 2200 pieces max.

Made In the U.S.A. Patent Protected

DASH NUMBER*

INDUCTANCE
(µH) ±10%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAX. (mA)

SERIES 1330 PHENOLIC CORE

-94K	0.10	40	25.0	680.0	0.08	1380
-96K	0.12	40	25.0	640.0	0.09	1300
-00K	0.15	38	25.0	600.0	0.10	1230
-02K	0.18	35	25.0	550.0	0.12	1120
-04K	0.22	33	25.0	510.0	0.14	1040
-06K	0.27	33	25.0	430.0	0.16	975
-08K	0.33	30	25.0	410.0	0.22	830
-10K	0.39	30	25.0	365.0	0.30	710
-12K	0.47	30	25.0	330.0	0.35	660
-14K	0.56	30	25.0	300.0	0.50	550
-16K	0.68	28	25.0	275.0	0.60	500
-18K	0.82	28	25.0	250.0	0.85	420
-20K	1.00	25	25.0	230.0	1.00	390

SERIES 1330 IRON CORE

-22K	1.20	25	7.9	150.0	0.18	620
-24K	1.50	28	7.9	140.0	0.22	560
-26K	1.80	30	7.9	125.0	0.30	480
-28K	2.20	30	7.9	115.0	0.40	415
-30K	2.70	37	7.9	100.0	0.55	355
-32K	3.30	45	7.9	90.0	0.85	285
-34K	3.90	45	7.9	80.0	1.00	263
-36K	4.70	45	7.9	75.0	1.20	239
-38K	5.60	50	7.9	65.0	1.80	195
-40K	6.80	50	7.9	60.0	2.00	185
-42K	8.20	55	7.9	55.0	2.70	160
-44K	10.00	55	7.9	50.0	3.30	144
-46K	12.0	45	2.5	40.0	2.70	160
-48K	15.0	45	2.5	35.0	2.80	157
-50K	18.0	45	2.5	30.0	3.10	149
-52K	22.0	45	2.5	25.0	3.30	144
-54K	27.0	45	2.5	20.0	3.50	140

SERIES 1330 FERRITE CORE

-56K	33.0	35	2.5	24.0	3.40	130
-58K	39.0	35	2.5	22.0	3.60	125
-60K	47.0	35	2.5	20.0	4.50	110
-62K	56.0	35	2.5	18.0	5.70	100
-64K	68.0	35	2.5	15.0	6.70	92
-66K	82.0	35	2.5	14.0	7.30	88
-68K	100.0	35	2.5	13.0	8.00	84
-70K	120.0	30	0.79	12.0	13.00	66
-72K	150.0	30	0.79	11.0	15.00	61
-74K	180.0	30	0.79	10.0	17.00	57
-76K	220.0	30	0.79	9.0	21.00	52
-78K	270.0	30	0.79	8.0	25.00	47
-80K	330.0	30	0.79	7.0	28.00	45
-82K	390.0	30	0.79	6.5	35.00	40
-84K	470.0	30	0.79	6.0	42.00	36
-86K	560.0	30	0.79	5.0	46.00	35
-88K	680.0	30	0.79	4.2	60.00	30
-90K	820.0	30	0.79	3.8	65.00	29
-92K	1000.0	30	0.79	3.4	72.00	28

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

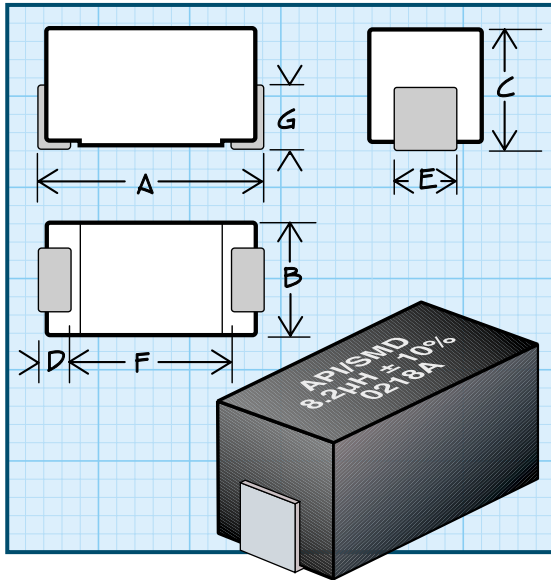
*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.



Unshielded Surface Mount Inductors

RF INDUCTORS



Military QPL Approval

M83446/31 Phenolic Core

M8344632 Iron Core

M83446/33 Ferrite Core

† **Ordering Note** Military parts must be ordered to the M83446/ part number

Physical Parameters

	Inches	Millimeters
A	0.300 to 0.325	7.62 to 8.26
B	0.105 to 0.125	2.67 to 3.18
C	0.125 to 0.145	3.18 to 3.68
D	0.020 Min.	0.508 Min
E	0.040 to 0.060	1.02 to 1.52
F	0.190 (Ref. only)	4.83 (Ref. only)
G	0.070 (Ref. only)	1.78 (Ref. only)

Weight Max (Grams) 0.30

Operating Temperature Range

Phenolic: -55°C to +125°C

Iron and Ferrite: -55°C to +105°C

Current Rating at 90°C Ambient

Phenolic: 35°C Rise

Iron and Ferrite: 15°C Rise

Maximum Power Dissipation at 90°C Ambient

Phenolic: 0.210 W

Iron: 0.090 W

Ferrite: 0.073 W

Packaging Tape & reel (16mm): 7" reel, 500 pieces max.; 13" reel, 2200 pieces max.

Made In the U.S.A. Patent Protected

DASH NUMBER*

MIL DASH #

INDUCTANCE (µH) ±10%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAX. (mA)

M83446/31 – SERIES MIL 1330 PHENOLIC CORE

-94K	01F	0.10	40	25.0	680.0	0.08	1380
-96K	02F	0.12	40	25.0	640.0	0.09	1300
-00K	03F	0.15	38	25.0	600.0	0.10	1230
-02K	04F	0.18	35	25.0	550.0	0.12	1120
-04K	05F	0.22	33	25.0	510.0	0.14	1040
-06K	06F	0.27	33	25.0	430.0	0.16	975
-08K	07F	0.33	30	25.0	410.0	0.22	830
-10K	08F	0.39	30	25.0	365.0	0.30	710
-12K	09F	0.47	30	25.0	330.0	0.35	660
-14K	10F	0.56	30	25.0	300.0	0.50	550
-16K	11F	0.68	28	25.0	275.0	0.60	500
-18K	12F	0.82	28	25.0	250.0	0.85	420
-20K	13F	1.00	25	25.0	230.0	1.00	390

M83446/32 – SERIES MIL 1330 IRON CORE

-22K	01F	1.20	25	7.9	150.0	0.18	620
-24K	02F	1.50	28	7.9	140.0	0.22	560
-26K	03F	1.80	30	7.9	125.0	0.30	480
-28K	04F	2.20	30	7.9	115.0	0.40	415
-30K	05F	2.70	37	7.9	100.0	0.55	355
-32K	06F	3.30	45	7.9	90.0	0.85	285
-34K	07F	3.90	45	7.9	80.0	1.00	263
-36K	08F	4.70	45	7.9	75.0	1.20	239
-38K	09F	5.60	50	7.9	65.0	1.80	195
-40K	10F	6.80	50	7.9	60.0	2.00	185
-42K	11F	8.20	55	7.9	55.0	2.70	160
-44K	12F	10.00	55	7.9	50.0	3.30	144
-46K	13F	12.0	45	2.5	40.0	2.70	160
-48K	14F	15.0	45	2.5	35.0	2.80	157
-50K	15F	18.0	45	2.5	30.0	3.10	149
-52K	16F	22.0	45	2.5	25.0	3.30	144
-54K	17F	27.0	45	2.5	20.0	3.50	140

M83446/33 – SERIES MIL 1330 FERRITE CORE

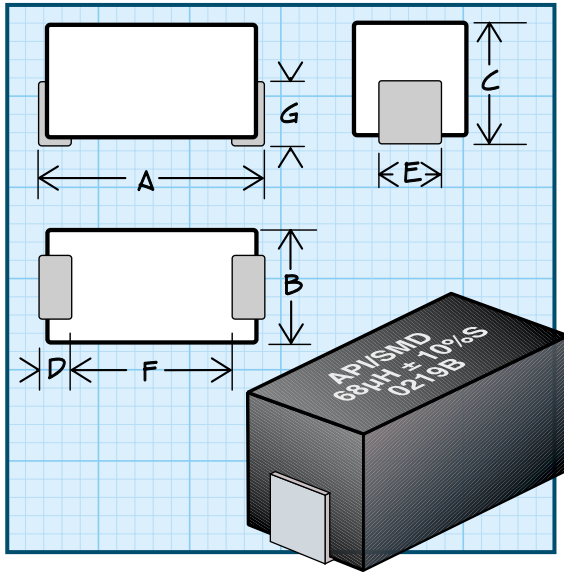
-56K	01F	33.0	35	2.5	24.0	3.40	130
-58K	02F	39.0	35	2.5	22.0	3.60	125
-60K	03F	47.0	35	2.5	20.0	4.50	110
-62K	04F	56.0	35	2.5	18.0	5.70	100
-64K	05F	68.0	35	2.5	15.0	6.70	92
-66K	06F	82.0	35	2.5	14.0	7.30	88
-68K	07F	100.0	35	2.5	13.0	8.00	84
-70K	08F	120.0	30	0.79	12.0	13.00	66
-72K	09F	150.0	30	0.79	11.0	15.00	61
-74K	10F	180.0	30	0.79	10.0	17.00	57
-76K	11F	220.0	30	0.79	9.0	21.00	52
-78K	12F	270.0	30	0.79	8.0	25.00	47
-80K	13F	330.0	30	0.79	7.0	28.00	45
-82K	14F	390.0	30	0.79	6.5	35.00	40
-84K	15F	470.0	30	0.79	6.0	42.00	36
-86K	16F	560.0	30	0.79	5.0	46.00	35
-88K	17F	680.0	30	0.79	4.2	60.00	30
-90K	18F	820.0	30	0.79	3.8	65.00	29
-92K	19F	1000.0	30	0.79	3.4	72.00	28

Parts listed above are QPL/MIL qualified

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Shielded Surface Mount Inductors



Physical Parameters

	Inches	Millimeters
A	0.300 to 0.325	7.62 to 8.26
B	0.105 to 0.125	2.67 to 3.18
C	0.125 to 0.145	3.18 to 3.68
D	0.020 Min.	0.508 Min.
E	0.040 to 0.060	1.02 to 1.52
F	0.190 (Ref. only)	4.83 (Ref. only)
G	0.070 (Ref. only)	1.78 (Ref. only)

Dimensions "A" and "C" are over terminations

Weight Max (Grams) 0.30

Operating Temperature Range -55°C to +105°C

Current Rating at 90°C Ambient 15°C Rise

Maximum Power Dissipation at 90°C 0.585 W

Incremental Current Current level which causes a maximum of 5% decrease in inductance.

Coupling 3% Max.

****Note** Self Resonant Frequency (SRF) values for -101K to -331K are calculated and for reference only.

Packaging Tape & reel (16mm): 7" reel, 500 pieces max.; 13" reel, 2200 pieces max.

Made In the U.S.A. Patent Protected

DASH NUMBER*

INDUCTANCE
(µH) ±10%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)**

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAXIMUM (mA)

INCREMENTAL
CURRENT (mA)

SERIES 1331 IRON CORE - IRON SLEEVE

-101K	0.10	45	25.0	490.0**	0.10	670	670
-121K	0.12	45	25.0	430.0**	0.11	635	635
-151K	0.15	45	25.0	415.0**	0.12	610	610
-181K	0.18	45	25.0	375.0**	0.13	585	585
-221K	0.22	45	25.0	330.0**	0.15	545	545
-271K	0.27	45	25.0	300.0**	0.16	530	530
-331K	0.33	44	25.0	260.0**	0.18	495	495
-391K	0.39	42	25.0	230.0	0.19	485	485
-471K	0.47	41	25.0	220.0	0.21	460	460
-561K	0.56	41	25.0	210.0	0.23	440	440
-681K	0.68	39	25.0	180.0	0.24	430	430
-821K	0.82	38	25.0	165.0	0.27	405	405
-102K	1.00	37	25.0	150.0	0.30	385	385
-122K	1.20	40	7.9	130.0	0.73	247	247
-152K	1.50	41	7.9	115.0	0.86	228	228
-182K	1.80	43	7.9	105.0	0.95	217	217
-222K	2.20	45	7.9	95.0	1.10	202	202
-272K	2.70	48	7.9	90.0	1.20	193	193
-332K	3.30	49	7.9	80.0	1.30	185	185
-392K	3.90	50	7.9	75.0	1.50	173	173
-472K	4.70	50	7.9	70.0	2.40	136	136
-562K	5.60	50	7.9	60.0	2.90	124	124
-682K	6.80	50	7.9	55.0	3.20	118	118
-822K	8.20	50	7.9	53.0	3.60	111	111
-103K	10.0	50	7.9	50.0	4.00	106	106

SERIES 1331 IRON CORE - FERRITE SLEEVE

-123K	12.0	36	2.5	35.0	3.00	122	122
-153K	15.0	38	2.5	30.0	3.40	115	115
-183K	18.0	40	2.5	26.0	3.80	108	108
-223K	22.0	40	2.5	24.0	4.90	96	96
-273K	27.0	40	2.5	21.0	5.80	88	88
-333K	33.0	41	2.5	20.0	6.50	83	83
-393K	39.0	42	2.5	19.0	7.90	75	75
-473K	47.0	44	2.5	16.0	9.30	69	69
-563K	56.0	44	2.5	15.0	11.0	64	64
-683K	68.0	45	2.5	13.0	12.0	61	61
-823K	82.0	45	2.5	11.0	13.0	59	59
-104K	100.0	40	2.5	10.5	16.8	51	51

SERIES 1331 FERRITE CORE - FERRITE SLEEVE

-124K	120.0	31	0.79	13.0	5.80	88	27
-154K	150.0	33	0.79	12.0	7.90	75	24
-184K	180.0	33	0.79	11.0	9.40	69	22
-224K	220.0	35	0.79	10.0	11.0	64	20
-274K	270.0	35	0.79	9.0	12.0	61	18
-334K	330.0	35	0.79	8.0	16.0	53	16
-394K	390.0	35	0.79	7.8	21.0	46	14
-474K	470.0	35	0.79	7.5	24.0	43	13
-564K	560.0	35	0.79	7.0	28.0	40	12

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

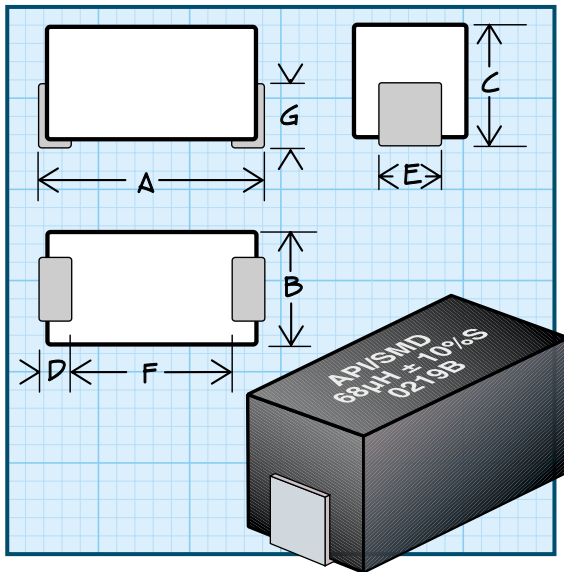
***Complete part # must include series # PLUS the dash #**

For further surface finish information, refer to TECHNICAL section of this catalog.



Shielded Surface Mount Inductors

RF INDUCTORS



Military QPL Approval

M83446/34 Iron Core/Iron Sleeve

M8344634 Iron Core/Ferrite Sleeve

M83446/35 Ferrite Core/Ferrite Sleeve

† **Ordering Note** Military parts must be ordered to the M83446/ part number

Physical Parameters

	Inches	Millimeters
A	0.300 to 0.325	7.62 to 8.26
B	0.105 to 0.125	2.67 to 3.18
C	0.125 to 0.145	3.18 to 3.68
D	0.020 Min.	0.508 Min.
E	0.040 to 0.060	1.02 to 1.52
F	0.190 (Ref. only)	4.83 (Ref. only)
G	0.070 (Ref. only)	1.78 (Ref. only)

Dimensions "A" and "C" are over terminations

Weight Max (Grams) 0.30

Operating Temperature Range -55°C to +105°C

Current Rating at 90°C Ambient 15°C Rise

Maximum Power Dissipation at 90°C 0.585 W

Incremental Current Current level which causes a maximum of 5% decrease in inductance.

Coupling 3% Max.

****Note** Self Resonant Frequency (SRF) values for -101K to -331K are calculated and for reference only.

Packaging Tape & reel (16mm): 7" reel, 500 pieces max.; 13" reel, 2200 pieces max.

Made In the U.S.A. Patent Protected

DASH NUMBER*

MIL DASH #

INDUCTANCE (µH) ±10%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)**

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAXIMUM (mA)

INCREMENTAL CURRENT (mA)

SERIES MIL 1331 IRON CORE - IRON SLEEVE								
-101K	01F	0.10	45	25.0	490.0**	0.10	670	670
-121K	02F	0.12	45	25.0	430.0**	0.11	635	635
-151K	03F	0.15	45	25.0	415.0**	0.12	610	610
-181K	04F	0.18	45	25.0	375.0**	0.13	585	585
-221K	05F	0.22	45	25.0	330.0**	0.15	545	545
-271K	06F	0.27	45	25.0	300.0**	0.16	530	530
-331K	07F	0.33	44	25.0	260.0**	0.18	495	495
-391K	08F	0.39	42	25.0	230.0	0.19	485	485
-471K	09F	0.47	41	25.0	220.0	0.21	460	460
-561K	10F	0.56	41	25.0	210.0	0.23	440	440
-681K	11F	0.68	39	25.0	180.0	0.24	430	430
-821K	12F	0.82	38	25.0	165.0	0.27	405	405
-102K	13F	1.00	37	25.0	150.0	0.30	385	385
-122K	14F	1.20	40	7.9	130.0	0.73	247	247
-152K	15F	1.50	41	7.9	115.0	0.86	228	228
-182K	16F	1.80	43	7.9	105.0	0.95	217	217
-222K	17F	2.20	45	7.9	95.0	1.10	202	202
-272K	18F	2.70	48	7.9	90.0	1.20	193	193
-332K	19F	3.30	49	7.9	80.0	1.30	185	185
-392K	20F	3.90	50	7.9	75.0	1.50	173	173
-472K	21F	4.70	50	7.9	70.0	2.40	136	136
-562K	22F	5.60	50	7.9	60.0	2.90	124	124
-682K	23F	6.80	50	7.9	55.0	3.20	118	118
-822K	24F	8.20	50	7.9	53.0	3.60	111	111
-103K	25F	10.0	50	7.9	50.0	4.00	106	106

SERIES MIL 1331 IRON CORE - FERRITE SLEEVE								
-123K	26F	12.0	36	2.5	35.0	3.00	122	122
-153K	27F	15.0	38	2.5	30.0	3.40	115	115
-183K	28F	18.0	40	2.5	26.0	3.80	108	108
-223K	29F	22.0	40	2.5	24.0	4.90	96	96
-273K	30F	27.0	40	2.5	21.0	5.80	88	88
-333K	31F	33.0	41	2.5	20.0	6.50	83	83
-393K	32F	39.0	42	2.5	19.0	7.90	75	75
-473K	33F	47.0	44	2.5	16.0	9.30	69	69
-563K	34F	56.0	44	2.5	15.0	11.0	64	64
-683K	35F	68.0	45	2.5	13.0	12.0	61	61
-823K	36F	82.0	45	2.5	11.0	13.0	59	59
-104K	37F	100.0	40	2.5	10.5	16.8	51	51

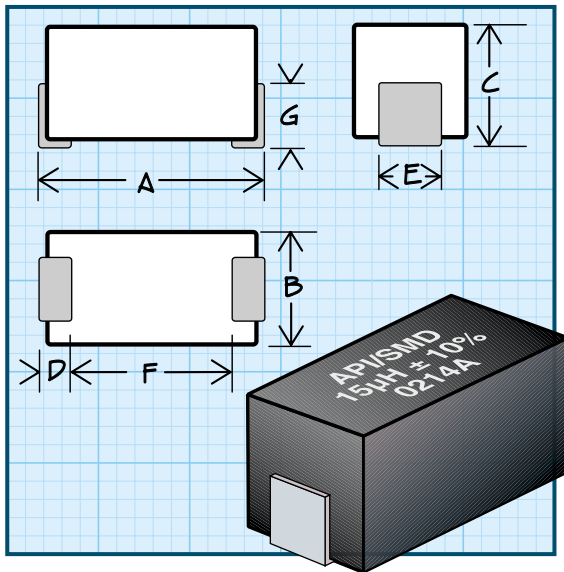
SERIES MIL 1331 FERRITE CORE - FERRITE SLEEVE								
-124K	01F	120.0	31	0.79	13.0	5.80	88	27
-154K	02F	150.0	33	0.79	12.0	7.90	75	24
-184K	03F	180.0	33	0.79	11.0	9.40	69	22
-224K	04F	220.0	35	0.79	10.0	11.0	64	20
-274K	05F	270.0	35	0.79	9.0	12.0	61	18
-334K	06F	330.0	35	0.79	8.0	16.0	53	16
-394K	07F	390.0	35	0.79	7.8	21.0	46	14
-474K	08F	470.0	35	0.79	7.5	24.0	43	13
-564K	09F	560.0	35	0.79	7.0	28.0	40	12

Parts listed above are QPL/MIL qualified

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Unshielded Surface Mount Inductors



Physical Parameters

	Inches	Millimeters
A	0.235 to 0.255	5.97 to 6.48
B	0.085 to 0.105	2.16 to 2.67
C	0.090 to 0.110	2.29 to 2.79
D	0.060 to 0.080	1.52 to 2.03
E	0.035 to 0.055	0.89 to 1.40
F	0.100 (Ref. only)	2.54 (Ref. only)
G	0.059 (Ref. only)	1.47 (Ref. only)

Dimensions "A" and "C" are over terminals.

Weight Max. (Grams)

Phenolic: 0.19
Iron & Ferrite: 0.22

Operating Temperature Range

Phenolic: -55°C to +125°C
Iron & Ferrite: -55°C to +105°C

Current Rating at 90°C Ambient

Phenolic: 35°C Rise
Iron & Ferrite: 15°C Rise

Maximum Power Dissipation at 90°C Ambient

Phenolic: 0.145 W
Iron & Ferrite: 0.062 W

Packaging Tape & reel (12mm): 7" reel, 750 pieces max.; 13" reel, 2700 pieces max.

Made In the U.S.A. Patent Protected

DASH NUMBER*

INDUCTANCE (µH) ±10%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAX. (mA)

SERIES 2510 PHENOLIC CORE						
-00K	0.10	25	25.0	640.0	0.14	865
-02K	0.12	25	25.0	610.0	0.17	785
-04K	0.15	25	25.0	530.0	0.20	725
-06K	0.18	25	25.0	510.0	0.22	690
-08K	0.22	25	25.0	480.0	0.26	635
-10K	0.27	25	25.0	440.0	0.40	510
-12K	0.33	25	25.0	410.0	0.50	455
-14K	0.39	25	25.0	380.0	0.60	415
-16K	0.47	25	25.0	340.0	0.63	405

SERIES 2510 IRON CORE						
-18K	0.56	35	25.0	240.0	0.19	500
-20K	0.68	35	25.0	210.0	0.21	475
-22K	0.82	35	25.0	200.0	0.24	444
-24K	1.0	35	7.9	180.0	0.27	418
-26K	1.2	25	7.9	160.0	0.32	385
-28K	1.5	30	7.9	140.0	0.53	300
-30K	1.8	30	7.9	125.0	0.59	283
-32K	2.2	30	7.9	120.0	0.76	250
-34K	2.7	30	7.9	100.0	0.90	229
-36K	3.3	35	7.9	90.0	1.35	187
-38K	3.9	35	7.9	85.0	1.70	167
-40K	4.7	35	7.9	80.0	2.30	143
-42K	5.6	35	7.9	75.0	3.10	123
-44K	6.8	35	7.9	64.0	3.60	114
-46K	8.2	35	7.9	50.0	4.8	99
-48K	10.0	35	7.9	45.0	5.7	91
-50K	12.0	25	2.5	29.0	3.3	120
-52K	15.0	25	2.5	24.0	3.8	110
-54K	18.0	25	2.5	21.0	4.2	106
-56K	22.0	25	2.5	18.0	4.7	100
-58K	27.0	25	2.5	17.0	5.7	91
-60K	33.0	25	2.5	15.0	6.2	87
-62K	39.0	25	2.5	13.0	8.1	76
-64K	47.0	25	2.5	12.0	9.8	69
-66K	56.0	25	2.5	11.0	12.0	62
-68K	68.0	25	2.5	10.0	13.8	58
-70K	82.0	25	2.5	9.0	19.0	50
-72K	100.0	25	2.5	8.9	21.0	47

SERIES 2510 FERRITE CORE						
-74K	120.0	15	0.79	8.5	17.0	52
-76K	150.0	15	0.79	7.6	19.0	49
-78K	180.0	15	0.79	7.2	21.5	46
-80K	220.0	15	0.79	6.8	32.0	38
-82K	270.0	15	0.79	6.2	37.0	35
-84K	330.0	15	0.79	5.3	47.0	31
-86K	390.0	15	0.79	5.0	53.0	30
-88K	470.0	15	0.79	4.6	60.0	28
-90K	560.0	15	0.79	4.3	71.0	25
-92K	680.0	15	0.79	3.8	83.0	23
-94K	820.0	15	0.79	3.2	95.0	22
-96K	1000.0	15	0.79	2.4	108.0	20

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

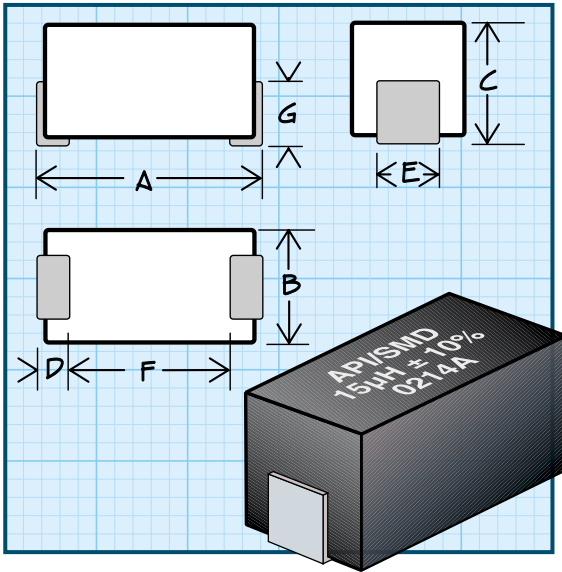
*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.



Unshielded Surface Mount Inductors

RF INDUCTORS



Military QPL Approval

M83446/28 Phenolic Core

M83446/29 Iron Core

M83446/30 Ferrite Core

† **Ordering Note** Military parts must be ordered to the M83446/ part number

Physical Parameters

	Inches	Millimeters
A	0.235 to 0.255	5.97 to 6.48
B	0.085 to 0.105	2.16 to 2.67
C	0.090 to 0.110	2.29 to 2.79
D	0.060 to 0.080	1.52 to 2.03
E	0.035 to 0.055	0.89 to 1.40
F	0.100 (Ref. only)	2.54 (Ref. only)
G	0.059 (Ref. only)	1.47 (Ref. only)

Dimensions "A" and "C" are over terminals.

Weight Max. (Grams)

Phenolic: 0.19

Iron & Ferrite: 0.22

Operating Temperature Range

Phenolic: -55°C to +125°C

Iron & Ferrite: -55°C to +105°C

Current Rating at 90°C Ambient

Phenolic: 35°C Rise

Iron & Ferrite: 15°C Rise

Maximum Power Dissipation at 90°C Ambient

Phenolic: 0.145 W

Iron & Ferrite: 0.062 W

Packaging Tape & reel (12mm): 7" reel, 750 pieces max.; 13" reel, 2700 pieces max.

Made In the U.S.A. Patent Protected

DASH NUMBER*

MIL DASH #

INDUCTANCE (µH) ±10%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAX. (mA)

M83446/28- SERIES MIL 2510 PHENOLIC CORE

-00K	01F	0.10	25	25.0	640.0	0.14	865
-02K	02F	0.12	25	25.0	610.0	0.17	785
-04K	03F	0.15	25	25.0	530.0	0.20	725
-06K	04F	0.18	25	25.0	510.0	0.22	690
-08K	05F	0.22	25	25.0	480.0	0.26	635
-10K	06F	0.27	25	25.0	440.0	0.40	510
-12K	07F	0.33	25	25.0	410.0	0.50	455
-14K	08F	0.39	25	25.0	380.0	0.60	415
-16K	09F	0.47	25	25.0	340.0	0.63	405

M83446/29- SERIES MIL 2510 IRON CORE

-18K	01F	0.56	35	25.0	240.0	0.19	500
-20K	02F	0.68	35	25.0	210.0	0.21	475
-22K	03F	0.82	35	25.0	200.0	0.24	444
-24K	04F	1.0	35	7.9	180.0	0.27	418
-26K	05F	1.2	25	7.9	160.0	0.32	385
-28K	06F	1.5	30	7.9	140.0	0.53	300
-30K	07F	1.8	30	7.9	125.0	0.59	283
-32K	08F	2.2	30	7.9	120.0	0.76	250
-34K	09F	2.7	30	7.9	100.0	0.90	229
-36K	10F	3.3	35	7.9	90.0	1.35	187
-38K	11F	3.9	35	7.9	85.0	1.70	167
-40K	12F	4.7	35	7.9	80.0	2.30	143
-42K	13F	5.6	35	7.9	75.0	3.10	123
-44K	14F	6.8	35	7.9	64.0	3.60	114
-46K	15F	8.2	35	7.9	50.0	4.8	99
-48K	16F	10.0	35	7.9	45.0	5.7	91
-50K	17F	12.0	25	2.5	29.0	3.3	120
-52K	18F	15.0	25	2.5	24.0	3.8	110
-54K	19F	18.0	25	2.5	21.0	4.2	106
-56K	20F	22.0	25	2.5	18.0	4.7	100
-58K	21F	27.0	25	2.5	17.0	5.7	91
-60K	22F	33.0	25	2.5	15.0	6.2	87
-62K	23F	39.0	25	2.5	13.0	8.1	76
-64K	24F	47.0	25	2.5	12.0	9.8	69
-66K	25F	56.0	25	2.5	11.0	12.0	62
-68K	26F	68.0	25	2.5	10.0	13.8	58
-70K	27F	82.0	25	2.5	9.0	19.0	50
-72K	28F	100.0	25	2.5	8.9	21.0	47

M83446/30- SERIES MIL 2510 FERRITE CORE

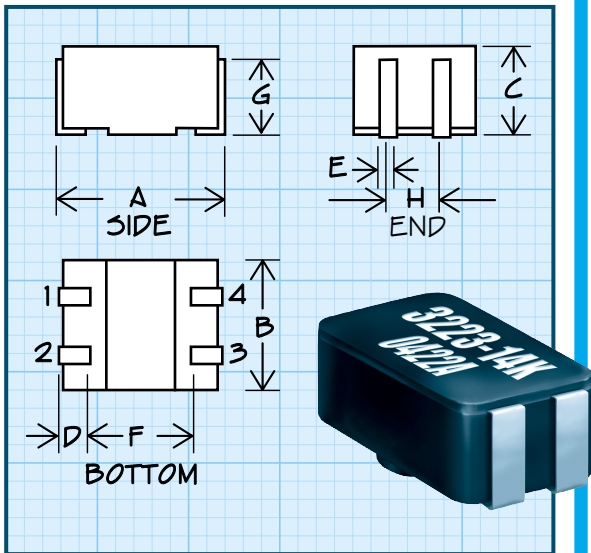
-74K	01F	120.0	15	0.79	8.5	17.0	52
-76K	02F	150.0	15	0.79	7.6	19.0	49
-78K	03F	180.0	15	0.79	7.2	21.5	46
-80K	04F	220.0	15	0.79	6.8	32.0	38
-82K	05F	270.0	15	0.79	6.2	37.0	35
-84K	06F	330.0	15	0.79	5.3	47.0	31
-86K	07F	390.0	15	0.79	5.0	53.0	30
-88K	08F	470.0	15	0.79	4.6	60.0	28
-90K	09F	560.0	15	0.79	4.3	71.0	25
-92K	10F	680.0	15	0.79	3.8	83.0	23
-94K	11F	820.0	15	0.79	3.2	95.0	22
-96K	12F	1000.0	15	0.79	2.4	108.0	20

Parts listed above are QPL/MIL qualified

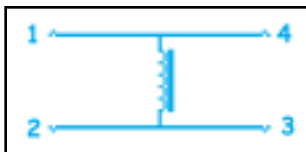
*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Surface Mount
Toroidal RF Inductor



Electrical Schematic:



Military Specifications:

MS-21422 Ref.

Physical Parameters

	Inches	Millimeters
A	0.320 ± 0.020	8.13 ± 0.508
B	0.230 ± 0.010	5.84 ± 0.254
C	0.155 ± 0.010	3.94 ± 0.254
D	0.040 Min.	1.016 Min.
E	0.045 ± 0.008	1.143 ± 0.203
F	0.240 (Ref Only)	6.10 (Ref Only)
G	0.125 (Ref Only)	3.18 (Ref Only)
H	0.100 ± 0.010	2.54 ± 0.254

Current rating at 90°C Ambient:

35°C Rise

Operating Temperature Range:

-55°C to +125°C

Maximum Power Dissipation at 90°C:

0.35 W

Core Material:

Powdered Iron

Weight Maximum:

0.50 grams

Packaging:

Tape & Reel (24mm): 13" reel
1000 pieces max.

DASH NUMBER*

INDUCTANCE (µH)

TOLERANCE

Q MINIMUM

TEST FREQ. (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (Ohms)

CURRENT RATING
MAXIMUM (mA)

SERIES 3223

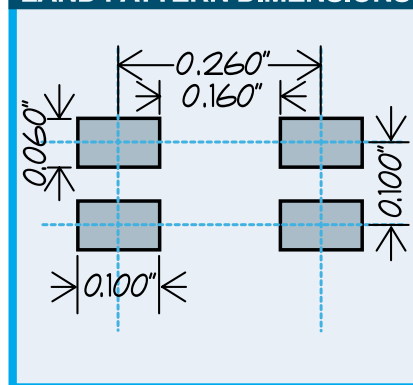
-00K	0.10	±10%	55	25.0	450	0.05	2200
-02K	0.12	±10%	60	25.0	400	0.06	2000
-04K	0.15	±10%	60	25.0	350	0.08	1800
-06K	0.18	±10%	60	25.0	320	0.10	1600
-08K	0.22	±10%	65	25.0	300	0.11	1500
-10K	0.27	±10%	65	25.0	280	0.13	1400
-12K	0.33	±10%	65	25.0	260	0.15	1300
-14K	0.39	±10%	65	25.0	240	0.18	1200
-16K	0.47	±10%	65	25.0	220	0.21	1100
-18K	0.56	±10%	70	25.0	200	0.25	1000
-20K	0.68	±10%	70	25.0	180	0.31	900
-22K	0.82	±10%	70	25.0	160	0.40	800
-24J	1.0	±5%	70	25.0	150	0.45	750
-26J	1.2	±5%	60	7.9	130	0.52	700
-28J	1.5	±5%	60	7.9	120	0.65	630
-30J	1.8	±5%	60	7.9	110	0.90	530
-32J	2.2	±5%	60	7.9	100	1.20	470
-34J	2.7	±5%	60	7.9	90	1.50	420
-36J	3.3	±5%	60	7.9	70	1.70	390
-38J	3.9	±5%	60	7.9	60	2.00	360
-40J	4.7	±5%	60	7.9	50	2.40	330
-42J	5.6	±5%	60	7.9	45	2.70	310
-44J	6.8	±5%	60	7.9	40	2.90	300
-46J	8.2	±5%	60	7.9	37	3.10	290
-48J	10.0	±5%	60	7.9	35	3.30	280

Optional Tolerances: J = 5% H = 3%

*Complete part # must include series # PLUS the dash #

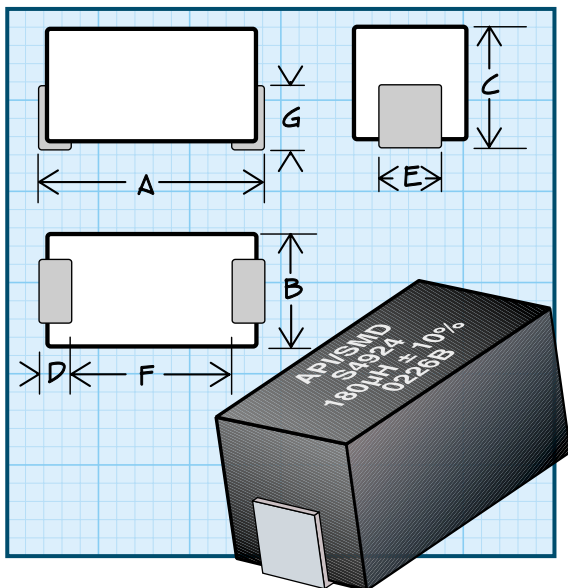
For further surface finish information,
refer to TECHNICAL section of this catalog.

LAND PATTERN DIMENSIONS



Shielded Surface Mount Inductors

RF INDUCTORS



Physical Parameters

	Inches	Millimeters
A	0.490 to 0.520	12.44 to 13.21
B	0.230 to 0.250	5.84 to 6.35
C	0.210 to 0.230	5.33 to 5.84
D	0.050 Min.	1.27 Min.
E	0.055 to 0.095	1.397 to 2.413
F	0.330 (Ref. only)	8.38 (Ref. only)
G	0.120 (Ref. only)	3.04 (Ref. only)

Mechanical Configuration

Units are encapsulated in an epoxy molded surface mount package

Operating Temperature Range

-55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C 0.385 W

Incremental Current Current which causes a max. of 5% change in Inductance

Dielectric Withstanding Voltage 1000V RMS Min.

Inductance Tolerance Tolerance is specified by suffixing an alpha character to the part number as follows: H = 3% and J = 5%. Units are normally supplied to the tolerance indicated in table.

Coupling 3% Max.

Packaging Tape & reel (24mm): 13" reel, 800 pieces max.; 7" reel not available

***Complete part # must include series # PLUS the dash #**

For further surface finish information, refer to TECHNICAL section of this catalog.

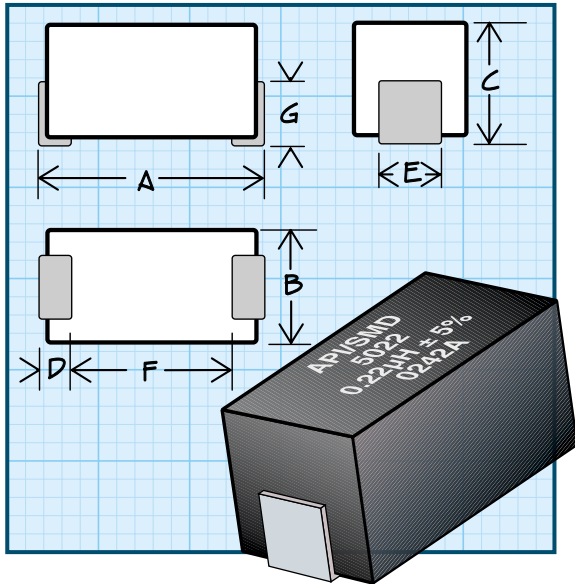
Optional Tolerances: J = 5% H = 3%

Made In the U.S.A.

DASH NUMBER*
INDUCTANCE (µH) ±10%
Q MINIMUM
TEST FREQUENCY (MHz)
SRF MINIMUM (MHz)
DC RESISTANCE MAXIMUM (OHMS)
CURRENT RATING MAXIMUM (mA)
INCREMENTAL CURRENT (mA)

SERIES S4924 PHENOLIC CORE - IRON SLEEVE							
-101K	0.10	50	25.0	450	0.025	3900	3900
-121K	0.12	50	25.0	425	0.034	3345	3345
-151K	0.15	50	25.0	400	0.037	3195	3195
-181K	0.18	50	25.0	350	0.047	2835	2835
-221K	0.22	49	25.0	325	0.067	2385	2385
-271K	0.27	47	25.0	300	0.11	1855	1855
-331K	0.33	46	25.0	275	0.13	1705	1705
-391K	0.39	44	25.0	250	0.18	1450	1450
-471K	0.47	44	25.0	235	0.25	1235	1235
-561K	0.56	43	25.0	210	0.33	1075	1075
-681K	0.68	42	25.0	190	0.45	915	915
-821K	0.82	40	25.0	180	0.59	800	800
SERIES S4924 IRON CORE - IRON SLEEVE							
-102K	1.00	44	25.0	140	0.07	2320	2320
-122K	1.20	44	7.9	130	0.10	1920	1920
-152K	1.50	44	7.9	115	0.12	1780	1780
-182K	1.80	44	7.9	105	0.14	1650	1650
-222K	2.20	44	7.9	100	0.19	1420	1420
-272K	2.70	44	7.9	92	0.28	1160	1160
-332K	3.30	44	7.9	85	0.35	1045	1045
-392K	3.90	44	7.9	75	0.40	970	970
-472K	4.70	44	7.9	70	0.55	830	830
-562K	5.60	44	7.9	65	0.72	725	725
-682K	6.80	50	7.9	55	1.02	610	610
-822K	8.20	50	7.9	50	1.32	535	535
-103K	10.0	50	7.9	46	1.62	485	485
-123K	12.0	55	2.5	44	2.0	440	440
SERIES S4924 FERRITE CORE - FERRITE SLEEVE							
-153K	15.0	45	2.5	49	0.8	618	300
-183K	18.0	45	2.5	45	0.89	580	250
-223K	22.0	45	2.5	41	0.96	561	210
-273K	27.0	45	2.5	38	1.19	504	195
-333K	33.0	45	2.5	34	1.37	471	160
-393K	39.0	50	2.5	29	1.93	397	150
-473K	47.0	50	2.5	27	2.11	380	135
-563K	56.0	50	2.5	25	2.23	369	124
-683K	68.0	50	2.5	21	2.70	355	122
-823K	82.0	50	2.5	10.5	2.44	342	120
-104K	100.0	50	2.5	10.0	3.12	312	113
-124K	120.0	55	0.79	9.7	3.6	291	98
-154K	150.0	55	0.79	8.5	4.1	272	84
-184K	180.0	55	0.79	8.0	4.4	263	76
-224K	220.0	55	0.79	7.5	5.0	247	67
-274K	270.0	55	0.79	7.0	5.8	228	60
-334K	330.0	55	0.79	6.5	6.4	218	55
-394K	390.0	60	0.79	6.2	7.4	203	46
-474K	470.0	60	0.79	5.7	9.5	178	43
-564K	560.0	60	0.79	4.7	10.5	171	40
-684K	680.0	60	0.79	4.5	11.8	160	38
-824K	820.0	60	0.79	4.2	13.0	152	33
-105K	1000.0	60	0.79	3.8	17.5	134	29
-125K	1200.0	50	0.25	3.0	22.1	120	28
-155K	1500.0	50	0.25	2.8	26.5	115	27
-185K	1800.0	50	0.25	2.6	29.9	110	24
-225K	2200.0	50	0.25	2.4	33.8	104	22
-275K	2700.0	50	0.25	2.2	47.3	88	20
-335K	3300.0	50	0.25	2.0	53.0	85	19
-395K	3900.0	50	0.25	1.9	73.8	72	17
-475K	4700.0	50	0.25	1.7	81.6	68	15
-565K	5600.0	50	0.25	1.6	98.9	61	14
-685K	6800.0	50	0.25	1.4	111.0	59	13
-825K	8200.0	50	0.25	1.2	119.0	57	12
-106K	10000.0	50	0.25	1.0	137.0	54	11
-126K	12000.0	30	0.079	0.80	143.0	50	9
-156K	15000.0	30	0.079	0.60	157.0	48	8
-186K	18000.0	30	0.079	0.55	225.0	46	7
-226K	22000.0	27	0.079	0.50	274.0	37	7
-276K	27000.0	27	0.079	0.40	308.0	35	7

Surface Mountable Inductors



Physical Parameters

	Inches	Millimeters
A	0.490 to 0.520	12.44 to 13.21
B	0.230 to 0.250	5.84 to 6.35
C	0.210 to 0.230	5.33 to 5.84
D	0.050 Min.	1.27 Min.
E	0.055 to 0.095	1.397 to 2.413
F	0.330 (Ref. only)	8.38 (Ref. only)
G	0.120 (Ref. only)	3.04 (Ref. only)

Weight Max. (Grams) 1.5

Mechanical Configuration Units are encapsulated in an epoxy molded surface mount package.

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C 0.405 W

Packaging Tape & reel (24mm): 13" reel, 800 pieces max.; 7" reel not available

Made In the U.S.A. Patent Protected

DASH NUMBER*

INDUCTANCE
(µH) ± 5%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAX. (mA)

SERIES 5022 PHENOLIC CORE

-151J	0.15	50	25.0	525	0.030	3500
-161J	0.16	50	25.0	525	0.040	3025
-181J	0.18	50	25.0	500	0.043	2915
-201J	0.20	50	25.0	475	0.047	2790
-221J	0.22	50	25.0	450	0.055	2580
-241J	0.24	45	25.0	415	0.060	2470
-271J	0.27	45	25.0	400	0.070	2285
-301J	0.30	45	25.0	380	0.080	2140
-331J	0.33	45	25.0	360	0.090	2015
-361J	0.36	45	25.0	345	0.098	1935
-391J	0.39	45	25.0	330	0.100	1915
-431J	0.43	45	25.0	315	0.110	1825
-471J	0.47	45	25.0	310	0.120	1750
-511J	0.51	45	25.0	300	0.130	1680
-561J	0.56	50	25.0	280	0.135	1645
-621J	0.62	50	25.0	260	0.140	1615
-681J	0.68	50	25.0	250	0.150	1555
-751J	0.75	50	25.0	230	0.180	1425
-821J	0.82	50	25.0	220	0.220	1300
-911J	0.91	50	25.0	210	0.240	1240
-102J	1.00	50	25.0	200	0.290	1125
-112J	1.10	33	7.9	190	0.420	930
-122J	1.20	33	7.9	180	0.420	930
-132J	1.30	33	7.9	170	0.480	875
-152J	1.50	33	7.9	160	0.500	855
-162J	1.60	33	7.9	155	0.600	780
-182J	1.80	33	7.9	150	0.650	755
-202J	2.00	33	7.9	140	0.800	675
-222J	2.20	33	7.9	135	0.950	620
-242J	2.40	33	7.9	130	1.100	575
-272J	2.70	33	7.9	120	1.200	550
-302J	3.00	33	7.9	115	1.800	455
-332J	3.30	33	7.9	110	2.000	430
-362J	3.60	33	7.9	105	2.150	415
-392J	3.90	33	7.9	100	2.300	395
-432J	4.30	33	7.9	95	2.400	390
-472J	4.70	33	7.9	90	2.600	375

Optional Tolerances: H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Surface Mountable Inductors

DASH NUMBER*
INDUCTANCE
(μ H) \pm 5%
Q MINIMUM
TEST FREQUENCY (MHz)
SRF MINIMUM (MHz)
DC RESISTANCE
MAXIMUM (OHMS)
CURRENT RATING
MAX. (mA)

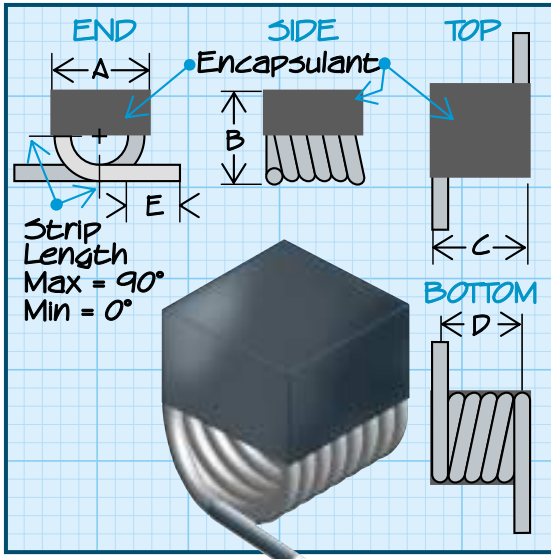
SERIES 5022 IRON CORE						
-512J	5.10	35	7.9	65	0.300	1040
-562J	5.60	45	7.9	60	0.320	1030
-622J	6.20	45	7.9	60	0.470	830
-682J	6.80	50	7.9	55	0.500	820
-752J	7.50	50	7.9	55	0.550	765
-822J	8.20	50	7.9	50	0.600	748
-912J	9.10	55	7.9	50	0.800	638
-103J	10.0	55	7.9	45	0.900	610
-113J	11.0	60	2.5	44	1.050	565
-123J	12.0	65	2.5	42	1.100	555
-133J	13.0	65	2.5	40	1.200	520
-153J	15.0	65	2.5	40	1.400	495
-163J	16.0	70	2.5	38	1.800	420
-183J	18.0	75	2.5	34	2.250	388
-203J	20.0	75	2.5	30	2.500	372
-223J	22.0	75	2.5	30	2.500	368
-243J	24.0	60	2.5	26	2.500	368
-273J	27.0	60	2.5	25	2.600	360
-303J	30.0	65	2.5	21	2.800	348
-333J	33.0	65	2.5	19	3.000	337
-363J	36.0	60	2.5	15.5	2.500	368
-393J	39.0	60	2.5	14.5	2.600	361
-433J	43.0	60	2.5	13.7	2.700	353
-473J	47.0	55	2.5	13.0	2.750	351
-513J	51.0	55	2.5	12.7	2.850	344
-563J	56.0	55	2.5	12.0	3.000	335
-623J	62.0	55	2.5	11.5	3.150	328
-683J	68.0	55	2.5	11.0	3.300	320
-753J	75.0	55	2.5	10.5	3.700	302
-823J	82.0	50	2.5	10.3	3.900	295
-913J	91.0	50	2.5	10.0	4.300	280
-104J	100.0	50	2.5	9.5	4.500	275
-114J	110.0	60	0.79	8.9	4.900	262
-124J	120.0	65	0.79	8.7	5.200	255
-134J	130.0	65	0.79	8.5	5.450	250
-154J	150.0	65	0.79	8.0	6.050	237
-164J	160.0	65	0.79	7.5	6.400	230
-184J	180.0	65	0.79	7.0	6.750	224
-204J	200.0	65	0.79	6.5	7.100	219
-224J	220.0	65	0.79	6.2	7.450	213
-244J	240.0	65	0.79	5.9	7.800	210
-274J	270.0	65	0.79	5.7	11.000	182
-304J	300.0	65	0.79	5.4	11.500	178
-334J	330.0	65	0.79	5.1	12.000	173
-364J	360.0	65	0.79	4.8	12.500	171
-394J	390.0	65	0.79	4.5	16.300	149
-434J	430.0	65	0.79	4.2	17.100	147
-474J	470.0	65	0.79	3.9	17.900	143
-514J	510.0	65	0.79	3.7	18.800	139
-564J	560.0	65	0.79	3.8	19.500	136
-624J	620.0	65	0.79	3.3	25.900	119
-684J	680.0	65	0.79	3.1	27.200	116
-754J	750.0	65	0.79	2.9	28.600	112
-824J	820.0	65	0.79	2.7	30.000	110
-914J	910.0	65	0.79	2.5	31.500	107
-105J	1000.0	65	0.79	2.3	33.000	105

Optional Tolerances: H=3% G=2% F=1%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Air Core Inductors



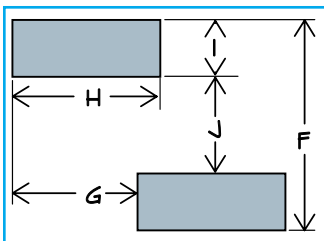
High Q, wire wound air cores Designed to operate over a wide frequency range. Standard flat cap top is suitable for automatic placement.

***Ordering** Suffix the dash number with RC to order optional water dissolvable flat top cap for applications requiring hand adjustment. The cap allows the part to be pick and placed onto the PCB, and will dissolve in almost all board cleaning solvents, leaving no residue. Suffix the dash number with NC to order option with no cap, for manual placement.

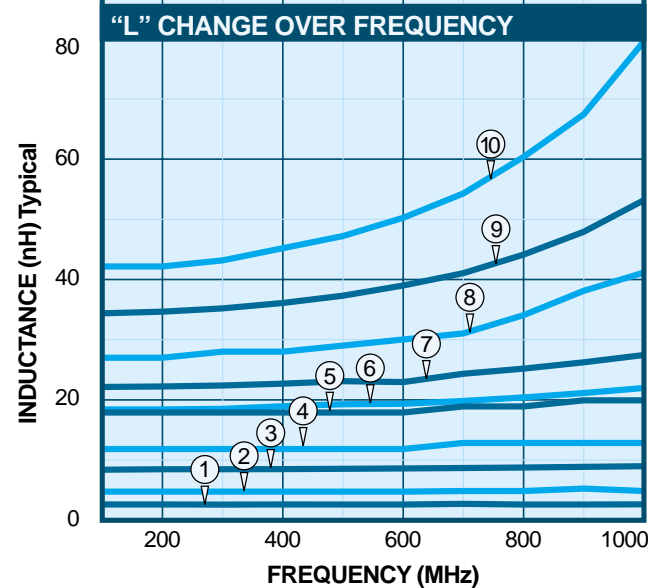
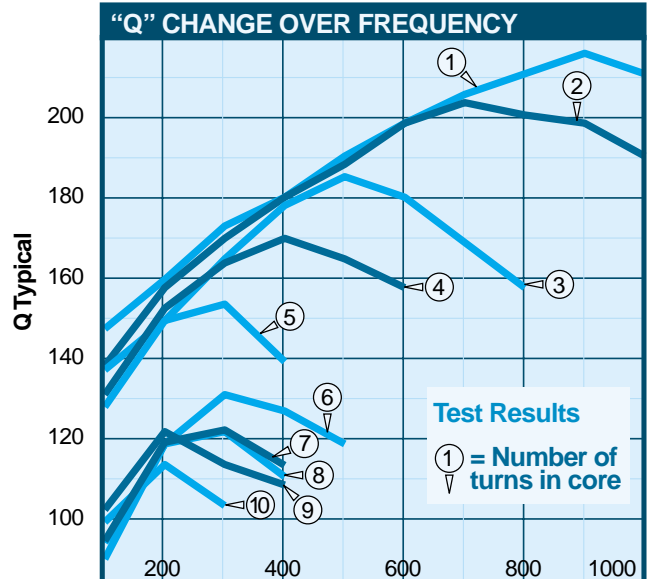
Operating Temperature Range -55°C to +125°C

Made in the U.S.A.

	Size A in.	Size A mm	Size B in.	Size B mm
A Max	0.120	3.05	0.120	3.05
B Max	0.125	3.18	0.125	3.18
C Max	0.145	3.68	0.270	6.86
D	0.115±.010	2.92±.25	0.230±.010	5.84±.25
E	0.05±.015	1.27±.38	0.05±.015	1.27±.38
F	0.165	4.19	0.285	7.23
G	0.110	2.79	0.110	2.79
H	0.130	3.30	0.130	3.30
I	0.050	1.27	0.050	1.27
J	0.065	1.65	0.185	4.69



DASH NUMBER*	TURNS (Ref.)	INDUCTANCE (nH)	Q Min.	TEST FREQUENCY (MHz)	SRF GHz, Min.	CURRENT RATING MAX. (Amps)	SIZE CODE
-1	1	2.5±10%	145	150	>3	3.0	A
-2	2	5.0±10%	140	150	>3	3.0	A
-3	3	8.0±5%	140	150	>3	3.0	A
-4	4	12.5±5%	137	150	>3	3.0	A
-5	5	18.5±5%	132	150	>3	3.0	A
-6	6	17.5±5%	100	150	>3	3.0	B
-7	7	22.0±5%	102	150	>3	3.0	B
-8	8	28.0±5%	105	150	2.6	3.0	B
-9	9	35.5±5%	112	150	1.8	3.0	B
-10	11	43.0±5%	106	150	1.5	3.0	B



For more detailed graphs, contact factory

Packaging Tape & reel

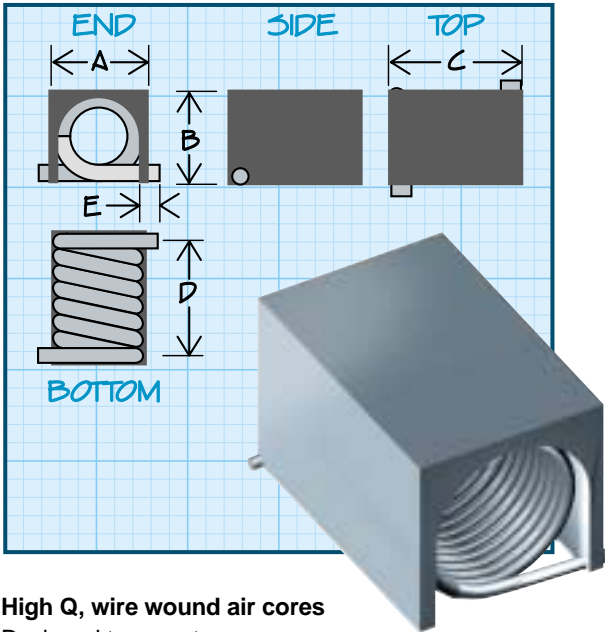
Size A, (12mm): 7" reel, 650 pieces max.; 13" reel, 2500 pieces max.;
Size B, (16mm): 7" reel, 400 pieces max.; 13" reel, 1400 pieces max.

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Air Core Inductors

RF INDUCTORS



High Q, wire wound air cores

Designed to operate over a wide frequency range.

Physical Parameters

	Inches	Millimeters
A Max	0.250	6.35
B Max	0.235	5.97
C Max	0.420	10.67
D	0.314±.020	7.98±0.510
E	0.032 ± 0.025	0.813 ± 0.635
F	0.394	10.00
G	0.095	2.42
H	0.185	4.70
I	0.080	2.03
J	0.234	5.95

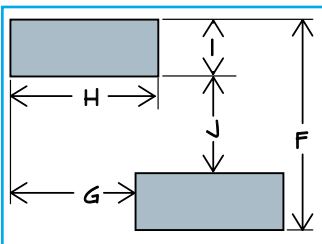
Operating Temperature Range -55°C to +125°C

Inductance and Q tested on HP4291A using HP16193A test fixture and correlation

Packaging Tape & reel (24mm): 13" reel, 800 pieces max.; 7" reel not available

Intermediate values Available upon request.

Made in the U.S.A.



DASH NUMBER*

TURN(S) (Ref.)

INDUCTANCE (nH) ±5%

Q MINIMUM

TEST FREQUENCY (MHz)

CURRENT RATING MAX. (Amps)

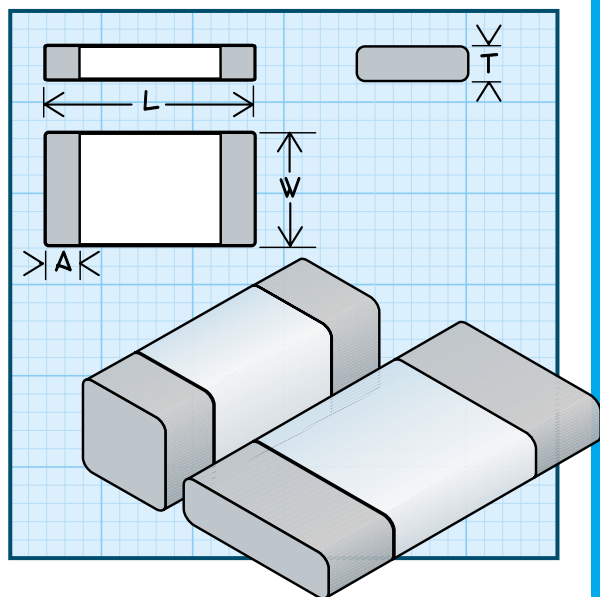
SRF MINIMUM (MHz)

SERIES 5526						
-1	9	90	95	50	3.5	1140
-2	10	111	87	50	3.5	1020
-3	11	130	87	50	3.0	900
-4	12	169	95	50	3.0	875
-5	13	206	95	50	3.0	800
-6	14	222	92	50	3.0	730
-7	15	246	95	50	3.0	685
-8	16	307	95	50	3.0	660
-9	17	380	95	50	2.5	590
-10	18	420	95	50	2.5	540
-11	19	491	95	50	2.0	535
-12	20	538	87	50	2.0	490

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Multilayer Ceramic Chip Inductors



Series C1608 Physical Parameters

	Inches	Millimeters
L	0.063 ± 0.006	1.60 ± 0.15
W	0.031 ± 0.006	0.80 ± 0.15
A	0.012 ± 0.008	0.30 ± 0.20
T	0.031 ± 0.006	0.80 ± 0.15

Series C2012 Physical Parameters

	Inches	Millimeters
L	0.079 ± 0.008	2.0 ± 0.2
W	0.049 ± 0.008	1.25 ± 0.2
A	0.020 ± 0.012	0.51 ± 0.30
T	0.039 ± 0.008	1.00 ± 0.20

Electrical Characteristics Measured @ 25°C

Operating Temperature Range -55°C to +125°C

Inductance Tolerance

Tolerance is as shown in table, except where ** denotes choice of: J = ±5% or K = ±10%

Current Rating The milliamp rating which changes the inductance by 5% maximum

Packaging Tape & reel (8mm):

C1608 – 7" reel, 4000 pieces max.; 13" reel not avail.

C2012 – 7" reel, 3000 pieces max.

†Inductance and Q test frequency:

Inductance values 100nH and less are tested at 100MHz. Above 100nH are tested at 50 MHz.

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

DASH NUMBER*

TOLERANCE

Q MIN. @ 100 MHz†

SRF MINIMUM (MHz)

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAX. (mA)

SERIES C1608						
-10NS	1.0	±0.3nH	8	4000	0.100	300
-12NS	1.2	±0.3nH	8	4000	0.100	300
-15NS	1.5	±0.3nH	8	4000	0.100	300
-18NS	1.8	±0.3nH	8	3800	0.120	300
-22NS	2.2	±0.3nH	8	3600	0.160	300
-27NS	2.7	±0.3nH	8	3400	0.200	300
-33NS	3.3	±0.3nH	10	3200	0.220	300
-39NS	3.9	±0.3nH	10	3000	0.250	300
-47NS	4.7	±0.3nH	10	2800	0.280	300
-56NS	5.6	±0.3nH	10	2700	0.290	300
-68NS**	6.8	**	10	2600	0.300	300
-82NS**	8.2	**	10	2200	0.330	300
-100**	10	**	10	1800	0.350	300
-120**	12	**	10	1650	0.400	300
-150**	15	**	10	1350	0.450	300
-180**	18	**	10	1350	0.500	300
-220**	22	**	10	1100	0.550	300
-270**	27	**	10	1100	0.600	300
-330**	33	**	10	1000	0.650	300
-390**	39	**	10	900	0.700	300
-470**	47	**	10	800	0.900	300
-560**	56	**	10	750	1.000	300
-680**	68	**	10	700	1.200	300
-820**	82	**	10	600	1.500	300
-101**	100	**	10	600	1.700	300
-121**	120	**	8	500	2.000	250
-151**	150	**	8	500	2.400	200
-181**	180	**	8	400	2.700	200
-221**	220	**	8	350	2.800	200
-271**	270	**	8	300	3.100	200

SERIES C2012						
-10NS	1.0	±0.3nH	10	4000	0.100	300
-12NS	1.2	±0.3nH	10	4000	0.100	300
-15NS	1.5	±0.3nH	10	4000	0.100	300
-18NS	1.8	±0.3nH	10	4000	0.100	300
-22NS	2.2	±0.3nH	10	3800	0.100	300
-27NS	2.7	±0.3nH	10	3600	0.100	300
-33NS	3.3	±0.3nH	10	3400	0.130	300
-39NS	3.9	±0.3nH	10	3200	0.150	300
-47NS	4.7	±0.3nH	10	3000	0.200	300
-56NS	5.6	±0.3nH	10	2800	0.230	300
-68NS**	6.8	**	10	2600	0.250	300
-82NS**	8.2	**	10	2200	0.280	300
-100**	10	**	10	1800	0.300	300
-120**	12	**	15	1650	0.350	300
-150**	15	**	15	1350	0.400	300
-180**	18	**	15	1350	0.450	300
-220**	22	**	15	1100	0.500	300
-270**	27	**	15	1100	0.550	300
-330**	33	**	15	900	0.600	300
-390**	39	**	15	900	0.650	300
-470**	47	**	15	850	0.700	300
-560**	56	**	15	750	0.750	300
-680**	68	**	15	700	0.800	300
-820**	82	**	15	600	0.900	300
-101**	100	**	15	500	1.000	300
-121**	120	**	10	450	1.300	250
-151**	150	**	10	400	1.500	250
-181**	180	**	10	350	1.800	250
-221**	220	**	10	330	2.000	250
-271**	270	**	10	300	2.500	250
-331**	330	**		270	3.000	250
-391**	390	**		220	3.500	250
-471**	470	**		180	4.000	250

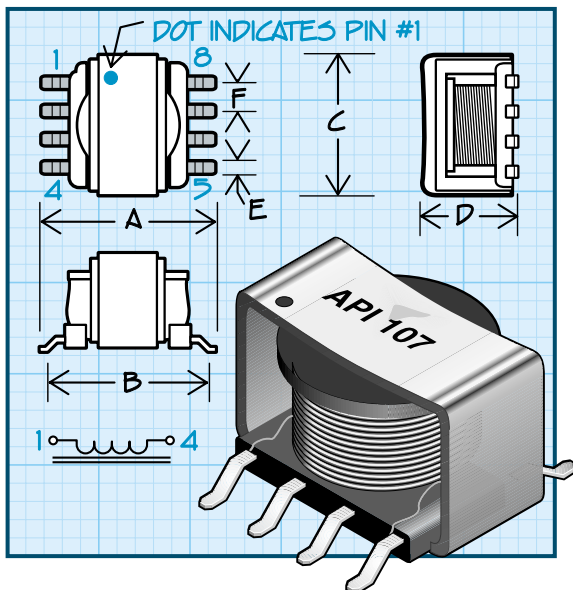
Series 4494R 4494

RoHS
Compliant

Traditional
First Quality

Surface Mount Inductors

RF INDUCTORS



Physical Parameters

	Inches	Millimeters
A	0.435 to 0.465	11.05 to 11.81
B	0.385 to 0.405	9.78 to 10.29
C	0.375 to 0.405	9.53 to 10.29
D	0.205 to 0.235	5.21 to 5.97
E (8 places)	0.028 typ.	0.71 typ.
F (6 places)	0.079 typ.	2.00 typ.

Termination

Pin 1 = Finish; Pin 4 = Start; others, no connection

Operating Temperature Range -20°C to +80°C

Maximum Power Dissipation at 25°C 0.140 W

Incremental Current

Maximum DC Current which will cause less than a 25% decrease in inductance, from the zero DC current inductance.

Current Rating

Current which will cause less than a +35°C temperature rise maximum, from +25°C Ambient

Packaging Tape & reel (24mm): 13" reel, 600 pieces max.; 7" reel not available

Made In the U.S.A.

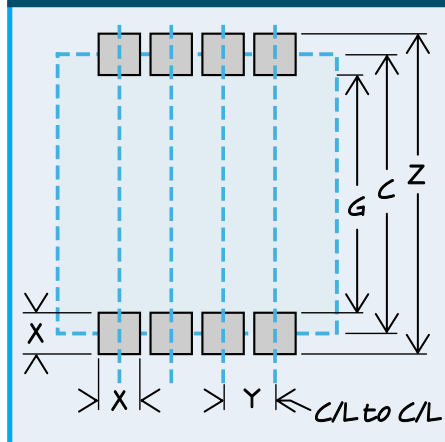
DASH NUMBER*
INDUCTANCE (mH) ±25%
Q Typical
TEST FREQUENCY (KHz)
SRF Typical (MHz)
DC RESISTANCE MAXIMUM (OHMS)
CURRENT RATING MAXIMUM (Amps)
INCREMENTAL CURRENT (Amps)

SERIES 4494							
-105	1.0	100	250	1.60	0.50	0.500	0.025
-125	1.2	100	250	1.50	0.57	0.480	0.024
-155	1.5	100	250	1.40	0.65	0.460	0.023
-185	1.8	100	250	1.30	0.70	0.420	0.022
-225	2.2	100	250	1.20	0.79	0.400	0.020
-275	2.7	100	250	1.00	1.25	0.330	0.018
-335	3.3	100	250	0.85	1.50	0.300	0.017
-395	3.9	100	250	0.75	1.70	0.280	0.016
-475	4.7	100	250	0.70	1.85	0.260	0.015
-565	5.6	100	250	0.65	2.60	0.220	0.013
-685	6.8	100	250	0.55	4.00	0.180	0.012
-825	8.2	100	250	0.50	4.50	0.170	0.011
-106	10.0	150	79	0.45	5.25	0.160	0.010
-126	12.0	150	79	0.40	5.75	0.150	0.009
-156	15.0	150	79	0.35	6.40	0.140	0.008
-186	18.0	150	79	0.30	9.25	0.120	0.007
-226	22.0	150	79	0.28	13.0	0.100	0.006
-276	27.0	150	79	0.26	14.5	0.095	0.006
-336	33.0	140	79	0.25	16.0	0.090	0.005
-396	39.0	140	79	0.22	18.0	0.085	0.005
-476	47.0	130	79	0.20	19.0	0.080	0.004
-566	56.0	130	79	0.19	27.0	0.070	0.003
-686	68.0	120	79	0.18	35.0	0.060	0.003
-826	82.0	120	79	0.16	43.0	0.055	0.002
-107	100.0	150	25	0.15	50.0	0.050	0.002

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

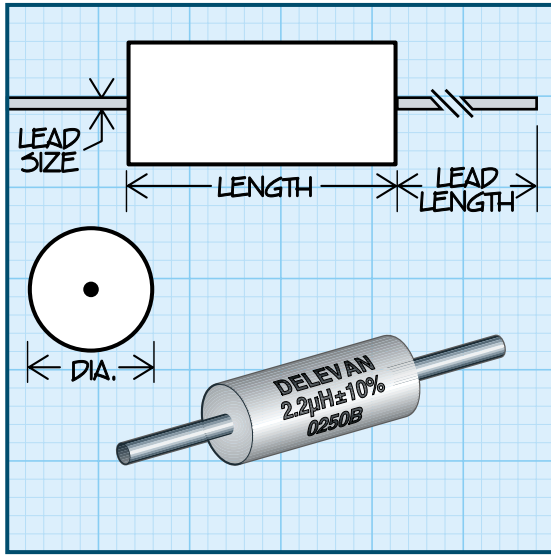
PAD DIMENSIONS



Pad Dimensions

	Inches	Millimeters
C	0.430	10.92
G	0.368	9.35
X	0.062	1.57
Y	0.079	2.01
Z	0.492	12.50

Molded Unshielded RF Coils



Physical Parameters

	Inches	Millimeters
Length	0.200 ± 0.010	5.08 ± 0.25
Diameter	0.078 ± 0.008	1.98 ± 0.20
Lead Size		
AWG #24 TCW	0.020 ± 0.0015	0.508 ± 0.038
Lead Length	1.5 ± 0.12	38.10 ± 3.05

Current Rating at 90°C Ambient

Phenolic: 35°C Rise
Iron and Ferrite: 15°C Rise

Operating Temperature Range

Phenolic: -55°C to +125°C
Iron and Ferrite: -55°C to +105°C

Maximum Power Dissipation at 90°C

Phenolic: 0.145 W
Iron and Ferrite: 0.062 W

Weight Max. (Grams)

Phenolic: 0.19
Iron and Ferrite: 0.22

Packaging Tape & reel: 12" reel, 3500 pieces max.;
14" reel, 6000 pieces max. For additional packaging
options, see technical section.

Made in the U.S.A.

DASH NUMBER*

INDUCTANCE
(µH) ±10%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAXIMUM (mA)

SERIES 0819 PHENOLIC CORE

-00K	0.10	35	25.0	680	0.13	895
-02K	0.12	35	25.0	650	0.15	835
-04K	0.15	35	25.0	560	0.18	760
-06K	0.18	35	25.0	540	0.21	705
-08K	0.22	30	25.0	500	0.25	645
-10K	0.27	30	25.0	440	0.38	525
-12K	0.33	25	25.0	410	0.49	460
-14K	0.39	25	25.0	380	0.59	420
-16K	0.47	25	25.0	340	0.62	410

SERIES 0819 IRON CORE

-18K	0.56	40	25.0	250	0.18	510
-20K	0.68	40	25.0	215	0.20	485
-22K	0.82	40	25.0	200	0.22	465
-24K	1.0	40	25.0	190	0.25	435
-26K	1.2	35	7.9	170	0.28	410
-28K	1.5	40	7.9	150	0.49	310
-30K	1.8	40	7.9	135	0.56	290
-32K	2.2	45	7.9	130	0.72	257
-34K	2.7	45	7.9	110	0.85	236
-36K	3.3	45	7.9	100	1.2	198
-38K	3.9	50	7.9	95	1.5	178
-40K	4.7	55	7.9	88	2.1	150
-42K	5.6	55	7.9	78	2.8	130
-44K	6.8	55	7.9	69	3.2	122
-46K	8.2	45	7.9	52	4.4	104
-48K	10.0	45	7.9	47	5.2	95

SERIES 0819 FERRITE CORE

-50K	12.0	40	2.5	31.0	3.0	126.0
-52K	15.0	40	2.5	26.0	3.4	118.0
-54K	18.0	40	2.5	23.0	3.8	112.0
-56K	22.0	45	2.5	20.0	4.3	105.0
-58K	27.0	45	2.5	17.0	4.7	100.0
-60K	33.0	45	2.5	15.0	5.2	95.0
-62K	39.0	45	2.5	13.5	6.8	83.5
-64K	47.0	45	2.5	12.5	8.2	76.0
-66K	56.0	45	2.5	11.5	10.0	69.0
-68K	68.0	45	2.5	10.5	11.5	64.0
-70K	82.0	45	2.5	10.0	16.0	54.5
-72K	100.0	45	2.5	9.5	17.5	52.0
-74K	120.0	35	0.79	8.9	16.0	54.5
-76K	150.0	35	0.79	7.9	18.0	51.0
-78K	180.0	35	0.79	7.5	20.0	49.0
-80K	220.0	35	0.79	7.1	26.5	42.5
-82K	270.0	35	0.79	6.6	30.5	39.0
-84K	330.0	35	0.79	6.2	40.5	34.0
-86K	390.0	35	0.79	5.9	43.0	33.0
-88K	470.0	35	0.79	5.4	48.0	31.5
-90K	560.0	35	0.79	5.0	60.0	28.0
-92K	680.0	35	0.79	4.5	66.0	27.0
-94K	820.0	35	0.79	3.9	72.0	25.5
-96K	1000.0	35	0.79	3.3	79.0	24.5

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

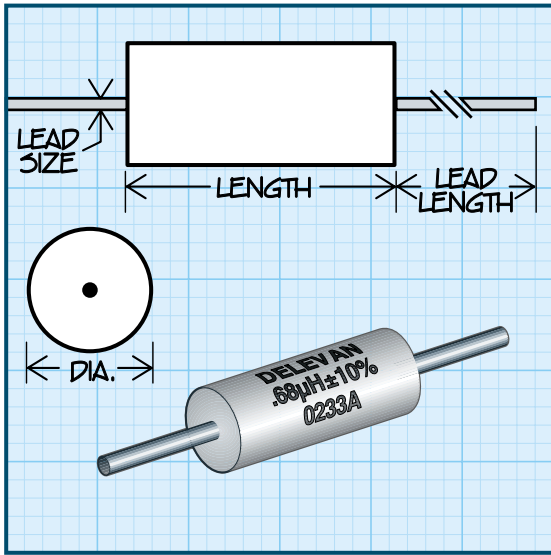
*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Series 1025R, 1026R 1025 QPL 1026



Molded Unshielded RF Coils



Military Specifications (1025 Series Only)

MS75083 (LT4K); MS75084 (LT10K); MS75085 (LT10K)

Physical Parameters

	Inches	Millimeters
Length	0.250 ± 0.010	6.35 ± 0.25
Diameter	0.095 ± 0.010	2.41 ± 0.25
Lead Size		
AWG #24 TCW	0.020 ± 0.0015	0.508 ± 0.038
Lead Length	1.5 ± 0.12	38.1 ± 3.05

Current Rating at 90°C Ambient

LT4K 35°C Rise
LT10K 15°C Rise

Operating Temperature Range

LT4K -55°C to +125°C
LT10K -55°C to +105°C

Maximum Power Dissipation at 90°C

Phenolic: LT4K 0.21 W
Iron: LT10K 0.09 W
Ferrite: LT10K 0.073 W

Weight Max. (Grams) 0.3

• For in-between values see Series 1782 (page 41)

Note (1026 Series only) Self Resonant Frequency (SRF) values are calculated and for reference only.

Packaging Tape & reel: 12" reel, 3500 pieces max.; 14" reel, 6000 pieces max. For additional packaging options, see technical section.

*Complete part # must include series # PLUS the dash #
For further surface finish information, refer to TECHNICAL section of this catalog.

Made in the U.S.A.

DASH NUMBER*
MIL DASH #
INDUCTANCE (µH)
TOLERANCE
Q MINIMUM
TEST FREQUENCY (MHz)
SRF MINIMUM (MHz)
DC RESISTANCE MAXIMUM (OHMS)
CURRENT RATING MAXIMUM (mA)

MS75083- SERIES 1025 PHENOLIC CORE (LT4K)								
-94K	1	0.10	±10%	40	25.0	680.0	0.08	1380
-96K	2	0.12	±10%	40	25.0	640.0	0.09	1300
-00K	3	0.15	±10%	38	25.0	600.0	0.10	1230
-02K	4	0.18	±10%	35	25.0	550.0	0.12	1120
-04K	5	0.22	±10%	33	25.0	510.0	0.14	1040
-06K	6	0.27	±10%	33	25.0	430.0	0.16	975
-08K	7	0.33	±10%	30	25.0	410.0	0.22	830
-10K	8	0.39	±10%	30	25.0	365.0	0.30	710
-12K	9	0.47	±10%	30	25.0	330.0	0.35	660
-14K	10	0.56	±10%	30	25.0	300.0	0.50	550
-16K	11	0.68	±10%	28	25.0	275.0	0.60	500
-18K	12	0.82	±10%	28	25.0	250.0	0.85	420
-20K	13	1.0	±10%	25	25.0	230.0	1.00	390

MS75084- SERIES 1025 IRON CORE (LT10K)								
-22K	1	1.2	±10%	25	7.9	150.0	0.18	620
-24K	2	1.5	±10%	28	7.9	140.0	0.22	560
-26K	3	1.8	±10%	30	7.9	125.0	0.30	480
-28K	4	2.2	±10%	30	7.9	115.0	0.40	415
-30K	5	2.7	±10%	37	7.9	100.0	0.55	355
-32K	6	3.3	±10%	45	7.9	90.0	0.85	285
-34K	7	3.9	±10%	45	7.9	80.0	1.00	263
-36K	8	4.7	±10%	45	7.9	75.0	1.20	239
-38K	9	5.6	±10%	50	7.9	65.0	1.80	195
-40K	10	6.8	±10%	50	7.9	60.0	2.00	185
-42K	11	8.2	±10%	55	7.9	55.0	2.70	160
-44K	12	10.0	±10%	55	7.9	50.0	3.30	144
-46K	13	12.0	±10%	45	2.5	40.0	2.70	160
-48K	14	15.0	±10%	45	2.5	35.0	2.80	157
-50K	15	18.0	±10%	50	2.5	30.0	3.10	149
-52K	16	22.0	±10%	50	2.5	25.0	3.30	144
-54K	17	27.0	±10%	50	2.5	20.0	3.50	140

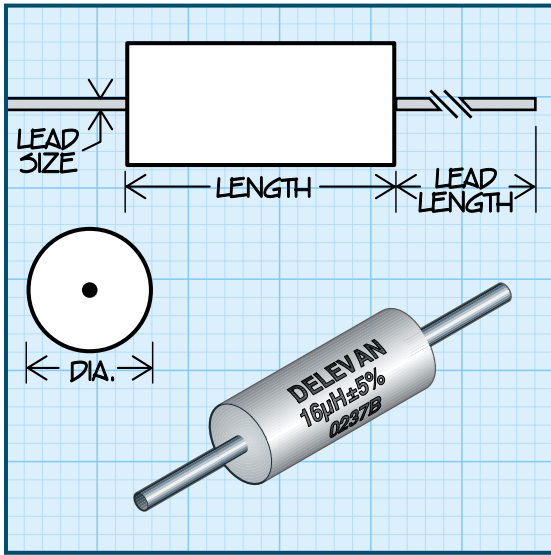
MS75085- SERIES 1025 FERRITE CORE (LT10K)								
-56K	1	33.0	±10%	45	2.5	24.0	3.40	130
-58K	2	39.0	±10%	45	2.5	22.0	3.60	125
-60K	3	47.0	±10%	45	2.5	20.0	4.50	110
-62K	4	56.0	±10%	45	2.5	18.0	5.70	100
-64K	5	68.0	±10%	50	2.5	15.0	6.70	92
-66K	6	82.0	±10%	50	2.5	14.0	7.30	88
-68K	7	100.0	±10%	50	2.5	13.0	8.00	84
-70K	8	120.0	±10%	30	0.79	12.0	13.00	66
-72K	9	150.0	±10%	30	0.79	11.0	15.00	61
-74K	10	180.0	±10%	30	0.79	10.0	17.00	57
-76K	11	220.0	±10%	30	0.79	9.0	21.00	52
-78K	12	270.0	±10%	30	0.79	8.0	25.00	47
-80K	13	330.0	±10%	30	0.79	7.0	28.00	45
-82K	14	390.0	±10%	30	0.79	6.5	35.00	40
-84K	15	470.0	±10%	30	0.79	6.0	42.00	36
-86K	16	560.0	±10%	30	0.79	5.0	46.00	35
-88K	17	680.0	±10%	30	0.79	4.2	60.00	30
-90K	18	820.0	±10%	30	0.79	3.8	65.00	29
-92K	19	1000.0	±10%	30	0.79	3.4	72.00	28

Parts listed above are QPL/MIL qualified

SERIES 1026 PHENOLIC CORE (LT4K)								
-00M		0.022	±20%	50	50.0	900.0	0.010	3800
-02K		0.027	±10%	40	25.0	875.0	0.030	2200
-04K		0.033	±10%	40	25.0	850.0	0.035	2000
-06K		0.039	±10%	40	25.0	825.0	0.040	1900
-08K		0.047	±10%	40	25.0	800.0	0.045	1800
-10K		0.056	±10%	40	25.0	775.0	0.050	1700
-12K		0.068	±10%	40	25.0	750.0	0.060	1500
-14K		0.082	±10%	40	25.0	725.0	0.070	1400

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

Molded Unshielded RF Coils



Physical Parameters

	Inches	Millimeters
Length	0.250 ± 0.010	6.35 ± 0.25
Diameter	0.095 ± 0.010	2.41 ± 0.25
Lead Size		
AWG #24 TCW	0.020± 0.0015	0.508 ± 0.038
Lead Length	1.5 ± 0.12	38.1 ± 3.05

Current Rating at 90°C Ambient

LT4K 35°C Rise
LT10K 15°C Rise

Operating Temperature Range

LT4K -55°C to + 125°C
LT10K -55°C to + 105°C

Maximum Power Dissipation at 90°C

Phenolic: LT4K 0.21 W
Iron: LT10K 0.09 W
Ferrite: LT10K 0.073 W

Weight Max. (Grams) 0.3

Packaging Tape & reel: 12" reel, 3500 pieces max.;
14" reel, 6000 pieces max. For additional packaging
options, see technical section.

Made in the U.S.A.

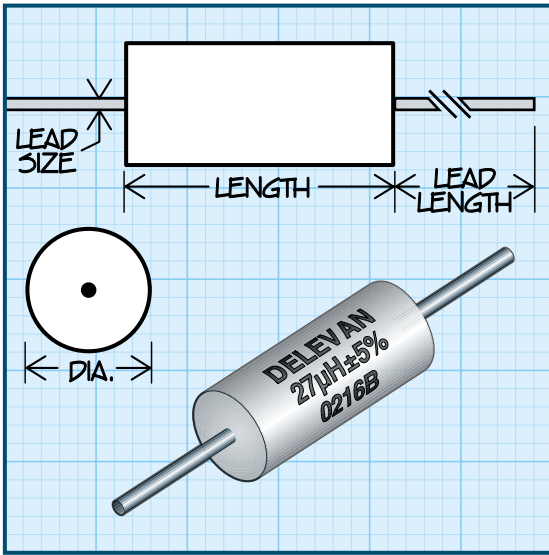
DASH NUMBER*	INDUCTANCE (µH) ±5%	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (mA)
SERIES 1782 PHENOLIC CORE (LT4K)						
-95J	0.11	40	25.0	640	0.09	1270
-97J	0.13	38	25.0	600	0.10	1200
-02J	0.16	35	25.0	550	0.12	1105
-03J	0.20	33	25.0	510	0.14	1025
-05J	0.24	33	25.0	430	0.16	960
-07J	0.30	30	25.0	410	0.22	815
-09J	0.36	30	25.0	365	0.30	700
-11J	0.43	30	25.0	330	0.35	650
-13J	0.51	30	25.0	300	0.50	545
-15J	0.62	28	25.0	275	0.60	495
-17J	0.75	28	25.0	250	0.85	415
-19J	0.91	25	25.0	230	1.00	385
SERIES 1782 IRON CORE (LT10K)						
-21J	1.10	25	7.9	150	0.18	590
-23J	1.30	25	7.9	140	0.22	535
-25J	1.60	28	7.9	125	0.30	455
-27J	2.00	30	7.9	115	0.40	395
-29J	2.40	30	7.9	100	0.55	335
-31J	3.00	37	7.9	90	0.85	270
-33J	3.60	45	7.9	80	1.00	250
-35J	4.30	45	7.9	75	1.20	230
-37J	5.10	45	7.9	65	1.80	185
-39J	6.20	50	7.9	60	2.00	175
-41J	7.50	50	7.9	55	2.70	155
-43J	9.10	55	7.9	50	3.70	130
-45J	11.0	45	2.5	40	2.70	155
-47J	13.0	40	2.5	35	2.80	150
-49J	16.0	40	2.5	30	3.10	145
-51J	20.0	50	2.5	25	3.30	140
-53J	24.0	50	2.5	20	3.50	135
SERIES 1782 FERRITE CORE (LT10K)						
-55J	30.0	45	2.5	20	3.40	130
-57J	36.0	45	2.5	22	3.60	125
-59J	43.0	45	2.5	20	4.50	110
-61J	51.0	45	2.5	18	5.70	100
-63J	62.0	45	2.5	15	6.70	92
-65J	75.0	50	2.5	14	7.30	88
-67J	91.0	50	2.5	13	8.00	84
-69J	110.0	30	0.790	12	13.0	66
-71J	130.0	30	0.790	11	15.0	61
-73J	160.0	30	0.790	10	17.0	57
-75J	200.0	30	0.790	9.0	21.0	52
-77J	240.0	30	0.790	8.0	25.0	47
-79J	300.0	30	0.790	7.0	28.0	45
-81J	360.0	30	0.790	6.5	35.0	40
-83J	430.0	30	0.790	6.0	42.0	36
-85J	510.0	30	0.790	5.0	46.0	35
-87J	620.0	30	0.790	4.0	60.0	30
-89J	750.0	30	0.790	3.8	65.0	29
-91J	910.0	30	0.790	3.4	72.0	28

Optional Tolerances: H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Molded Unshielded RF Coils



Military Specifications MS14046 (LT10K); MS18130 (LT4K); MS90538 (LT10K);

● No MS # Issued

Physical Parameters

	Inches	Millimeters
Length	0.375 ± 0.010	9.53 ± 0.25
Diameter	0.156 ± 0.010	3.96 ± 0.25
Lead Size		
AWG #22 TCW	0.025 ± 0.002	0.635 ± 0.051
Lead Length	1.44 ± 0.12	36.58 ± 3.05

Current Rating at 90°C Ambient

LT4K 35°C Rise
LT10K 15°C Rise

Operating Temperature Range

LT4K -55°C to +125°C;
LT10K -55°C to +105°C

Maximum Power Dissipation at 90°C

LT4K 0.312 W
LT10K 0.134 W

Weight Max. (Grams) 0.9

• For in-between values, see Series 511 (page 44)

Packaging Tape & reel: 12" reel, 2500 pieces max.; 14" reel, 4000 pieces max. For additional packaging options, see technical section.

Made in the U.S.A.

MS18130- SERIES 1537 PHENOLIC CORE (LT4K)								
DASH NUMBER*	MIL DA-SH #	INDUCTANCE (µH)	TOLERANCE	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (Ω)	CURRENT RATING MAXIMUM (mA)
-00M	1	0.15	± 20%	50	25.0	525.0	0.03	2740
-02M	2	0.22	± 20%	50	25.0	450.0	0.055	2020
-04M	3	0.33	± 20%	45	25.0	360.0	0.09	1580
-06M	4	0.47	± 20%	45	25.0	310.0	0.12	1370
-07K	5	0.56	± 10%	50	25.0	280.0	0.135	1290
-08K	6	0.68	± 10%	50	25.0	250.0	0.15	1220
-10K	7	0.82	± 10%	50	25.0	220.0	0.22	1020
-12K	8	1.00	± 10%	50	25.0	200.0	0.29	880
-14K	9	1.20	± 10%	33	7.9	180.0	0.42	730
-16K	10	1.50	± 10%	33	7.9	160.0	0.50	670
-18K	11	1.80	± 10%	33	7.9	150.0	0.65	590
-20K	12	2.20	± 10%	33	7.9	135.0	0.95	485
-22K	13	2.70	± 10%	33	7.9	120.0	1.20	430
-24K	14	3.30	± 10%	33	7.9	110.0	2.00	335
-26K	15	3.90	± 10%	33	7.9	100.0	2.30	310
-28K	16	4.70	± 10%	33	7.9	90.0	2.60	294

MS14046- SERIES 1537 IRON CORE (LT10K)								
DASH NUMBER*	MIL DA-SH #	INDUCTANCE (µH)	TOLERANCE	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (Ω)	CURRENT RATING MAXIMUM (mA)
-30K	1	5.60	± 10%	45	7.9	60.0	0.32	565
-32K	2	6.80	± 10%	50	7.9	55.0	0.50	450
-34K	3	8.20	± 10%	50	7.9	50.0	0.60	410
-36K	4	10.0	± 10%	55	7.9	45.0	0.90	335
-38K	5	12.0	± 10%	65	2.5	42.0	1.10	305
-40K	6	15.0	± 10%	65	2.5	40.0	1.40	271
-42K	7	18.0	± 10%	75	2.5	34.0	2.25	213
-44K	8	22.0	± 10%	75	2.5	30.0	2.50	202
-46J	●	24.0	± 5%	60	2.5	26.0	2.50	202
-47K	9	27.0	± 10%	60	2.5	25.0	2.60	198
-48J	●	27.0	± 5%	60	2.5	25.0	2.60	198
-50J	●	30.0	± 5%	65	2.5	21.0	2.80	191
-51K	10	33.0	± 10%	65	2.5	19.0	3.00	185
-52J	●	33.0	± 5%	65	2.5	19.0	3.00	185

MS90538- SERIES 1537 IRON CORE (LT10K)								
DASH NUMBER*	MIL DA-SH #	INDUCTANCE (µH)	TOLERANCE	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (Ω)	CURRENT RATING MAXIMUM (mA)
-54J	1	36.0	± 5%	60	2.5	15.5	2.50	202
-56J	2	39.0	± 5%	60	2.5	14.5	2.60	198
-58J	3	43.0	± 5%	60	2.5	13.7	2.70	194
-60J	4	47.0	± 5%	55	2.5	13.0	2.75	193
-62J	5	51.0	± 5%	55	2.5	12.7	2.85	189
-64J	6	56.0	± 5%	55	2.5	12.0	3.00	184
-66J	7	62.0	± 5%	55	2.5	11.5	3.15	180
-68J	8	68.0	± 5%	55	2.5	11.0	3.30	176
-70J	9	75.0	± 5%	55	2.5	10.5	3.70	166
-72J	10	82.0	± 5%	50	2.5	10.3	3.90	162
-74J	11	91.0	± 5%	50	2.5	10.0	4.30	154
-76J	12	100.0	± 5%	50	2.5	9.5	4.50	151
-78J	13	110.0	± 5%	60	0.79	8.9	4.90	144
-80J	14	120.0	± 5%	65	0.79	8.7	5.20	140
-82J	15	130.0	± 5%	65	0.79	8.5	5.45	137
-84J	16	150.0	± 5%	65	0.79	8.0	6.05	130
-86J	17	160.0	± 5%	65	0.79	7.5	6.40	126
-88J	18	180.0	± 5%	65	0.79	7.0	6.75	123
-90J	19	200.0	± 5%	65	0.79	6.5	7.10	120
-92J	20	220.0	± 5%	65	0.79	6.2	7.45	117
-94J	21	240.0	± 5%	65	0.79	5.9	7.80	115

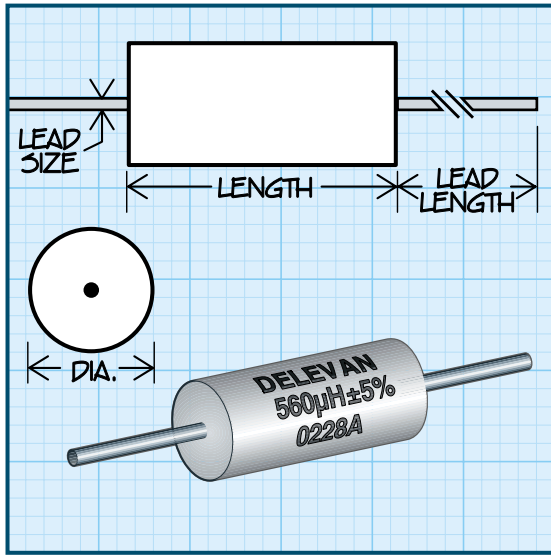
Parts listed above are QPL/MIL qualified

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Molded Unshielded RF Coils



Physical Parameters

	Inches	Millimeters
Length	0.375 ± 0.010	9.53 ± 0.25
Diameter	0.156 ± 0.010	3.96 ± 0.25
Lead Size		
AWG #22 TCW	0.025 ± 0.002	0.635 ± 0.051
Lead Length	1.44 ± 0.12	36.58 ± 3.05

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature -55°C to +125°C

Maximum Power Dissipation at 90°C 0.312 W

Weight Max. (Grams) 1.0

Core Material Iron

Packaging Tape & reel: 12" reel, 2500 pieces max.; 14" reel, 4000 pieces max. For additional packaging options, see technical section.

Made in the U.S.A.

DASH NUMBER*

INDUCTANCE
(µH) ±5%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAXIMUM (mA)

SERIES 1638 IRON CORE

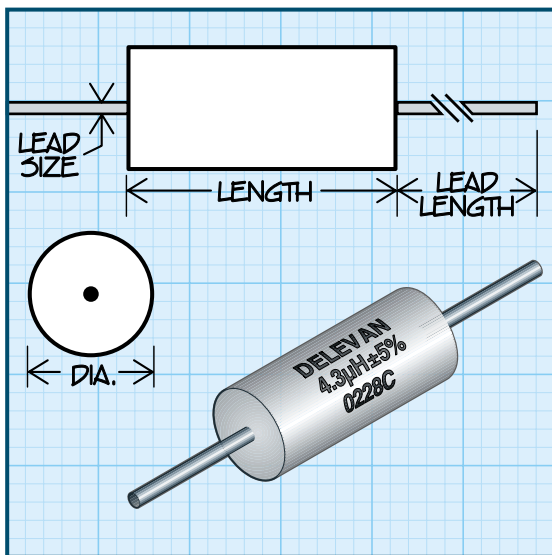
-00J	270	65	0.79	5.7	11.0	143
-02J	300	65	0.79	5.4	11.5	140
-04J	330	65	0.79	5.1	12.0	136
-06J	360	65	0.79	4.8	12.5	134
-08J	390	65	0.79	4.5	16.3	117
-10J	430	65	0.79	4.2	17.1	115
-12J	470	65	0.79	3.9	17.9	112
-14J	510	65	0.79	3.7	18.8	109
-16J	560	65	0.79	3.8	19.5	107
-18J	620	65	0.79	3.3	25.9	93
-20J	680	65	0.79	3.1	27.2	91
-22J	750	65	0.79	2.9	28.6	88
-24J	820	65	0.79	2.7	30.0	86
-26J	910	65	0.79	2.5	31.5	84
-28J	1000	65	0.79	2.3	33.0	82

Optional Tolerances: H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Molded Unshielded RF Coils



Physical Parameters

	Inches	Millimeters
Length	0.375 ± 0.010	9.53 ± 0.25
Diameter	0.156 ± 0.010	3.96 ± 0.25
Lead Size		
AWG #22 TCW	0.025 ± 0.002	0.635 ± 0.051
Lead Length	1.44 ± 0.12	36.58 ± 3.05

Current Rating at 90°C Ambient

Phenolic 35°C Rise
Iron 15°C Rise

Operating Temperature Range

Phenolic -55°C to +125°C;
Iron -55°C to +105°C

Maximum Power Dissipation at 90°C

Phenolic 0.312 W
Iron 0.134 W

Weight Max. (Grams) 0.9

Packaging Tape & reel: 12" reel, 2500 pieces max.;
14" reel, 4000 pieces max. For additional packaging
options, see technical section.

Made in the U.S.A.

DASH NUMBER*

INDUCTANCE
(µH) ± 5%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAXIMUM (mA)

SERIES 511 PHENOLIC CORE

-2J	0.16	50	25.0	525	0.040	2370
-3J	0.18	50	25.0	500	0.043	2285
-4J	0.20	50	25.0	475	0.047	2185
-6J	0.24	45	25.0	415	0.060	1935
-7J	0.27	45	25.0	400	0.070	1790
-8J	0.30	45	25.0	380	0.080	1675
-10J	0.36	45	25.0	345	0.098	1515
-11J	0.39	45	25.0	330	0.100	1500
-12J	0.43	45	25.0	315	0.110	1430
-14J	0.51	45	25.0	300	0.130	1315
-16J	0.62	50	25.0	260	0.140	1265
-18J	0.75	50	25.0	230	0.180	1115
-20J	0.91	50	25.0	210	0.240	970
-22J	1.10	33	7.9	190	0.420	730
-24J	1.30	33	7.9	170	0.480	685
-26J	1.60	33	7.9	155	0.600	610
-28J	2.00	33	7.9	140	0.800	530
-30J	2.40	33	7.9	130	1.100	450
-32J	3.00	33	7.9	115	1.800	355
-34J	3.60	33	7.9	105	2.150	325
-36J	4.30	33	7.9	95	2.400	305

SERIES 511 IRON CORE

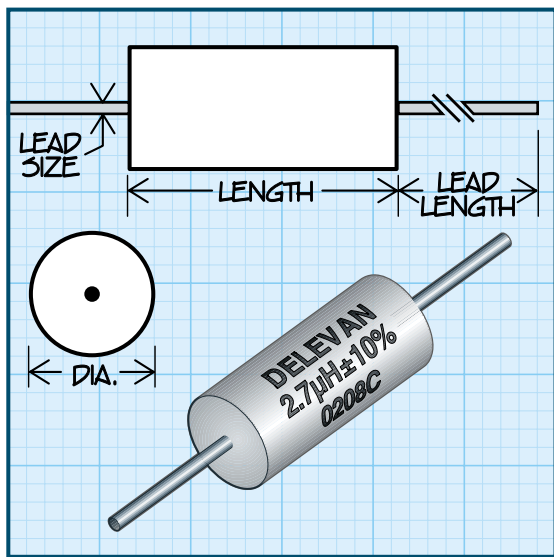
-38J	5.10	35	7.9	65	0.360	570
-40J	6.20	45	7.9	60	0.470	455
-42J	7.50	50	7.9	55	0.550	420
-44J	9.10	55	7.9	50	0.800	350
-46J	11.0	60	2.5	44	1.050	310
-48J	13.0	65	2.5	40	1.200	285
-50J	16.0	70	2.5	38	1.800	230
-52J	20.0	75	2.5	30	2.500	195

Optional Tolerances: H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Molded Unshielded RF Coils



Military Specifications

MS75008 (LT4K); MS75101 (LT10K)

Physical Parameters

	Inches	Millimeters
Length	0.437 ± 0.010	11.10 ± 0.25
Diameter	0.187 ± 0.010	4.75 ± 0.25
Lead Size		
AWG #22 TCW	0.025 ± 0.002	0.635 ± 0.051
Lead Length	1.44 ± 0.12	36.58 ± 3.05

Current Rating at 90°C Ambient

LT4K 35°C Rise
LT10K 15°C Rise

Operating Temperature Range

LT4K -55°C to +125°C;
LT10K -55°C to +105°C

Maximum Power Dissipation at 90°C

LT4K 0.385 W
LT10K 0.165 W

Weight Max. (Grams) 0.95

Packaging Tape & reel: 12" reel, 2500 pieces max.;
14" reel, 3000 pieces max. For additional packaging
options, see technical section.

● No MS # Issued

Made in the U.S.A.

DASH NUMBER*

MIL DASH #

INDUCTANCE (µH)

TOLERANCE

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAXIMUM (ma)

MS75008- SERIES 1840 PHENOLIC CORE (LT4K)								
-00M	21	0.15	± 20%	55	25.0	510	0.030	3050
-02M	22	0.22	± 20%	55	25.0	415	0.035	2820
-04M	23	0.33	± 20%	55	25.0	350	0.050	2360
-05M	●	0.39	± 20%	55	25.0	300	0.080	1860
-06M	24	0.47	± 20%	55	25.0	300	0.080	1860
-07K	25	0.56	± 10%	55	25.0	270	0.100	1670
-08K	26	0.68	± 10%	55	25.0	250	0.120	1520
-09K	27	0.82	± 10%	55	25.0	220	0.180	1240
-10K	28	1.00	± 10%	55	25.0	200	0.250	1050
-11K	29	1.20	± 10%	35	7.9	180	0.400	835
-12K	30	1.50	± 10%	35	7.9	170	0.485	755
-13K	31	1.80	± 10%	35	7.9	150	0.740	610
-14K	32	2.20	± 10%	35	7.9	140	0.900	555
-16K	33	2.70	± 10%	35	7.9	120	1.100	525
MS75101- SERIES 1840 IRON CORE (LT10K)								
-18K	1	3.30	± 10%	35	7.9	70	0.120	1020
-20K	2	3.90	± 10%	35	7.9	65	0.155	900
-22K	3	4.70	± 10%	35	7.9	60	0.210	775
-24K	4	5.60	± 10%	35	7.9	50	0.280	670
-26K	5	6.80	± 10%	35	7.9	50	0.375	580
-28K	6	8.20	± 10%	35	7.9	48	0.400	560
-30K	7	10.0	± 10%	35	7.9	42	0.600	455
-32K	8	12.0	± 10%	50	2.5	36	0.850	385
-34K	9	15.0	± 10%	55	2.5	30	1.200	324
-35K	10	18.0	± 10%	60	2.5	30	1.800	265
-36K	11	22.0	± 10%	60	2.5	24	2.000	251
-38K	12	27.0	± 10%	65	2.5	22	2.750	214

Parts listed above are QPL/MIL qualified

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

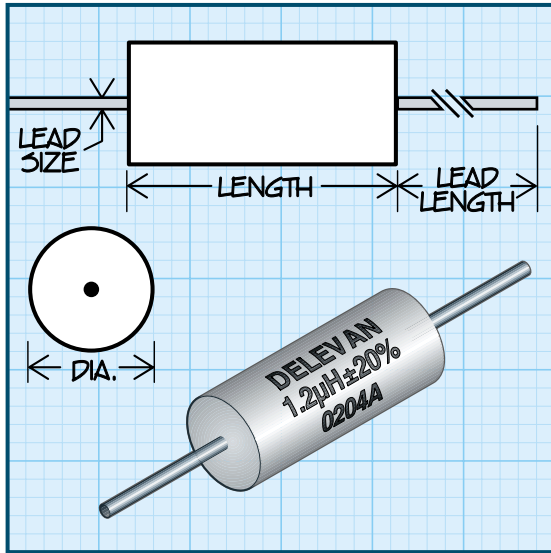
*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Series 1944R & 1945R 1944 & 1945



Molded Unshielded RF Coils



Test Methods MIL-PRF-15305 test methods, only.
MS21389-01 to MS21389-17, reference - 1944 Series
MS21390-01 to MS21390-39, reference - 1945 Series

Physical Parameters

	Inches	Millimeters
Length	0.420 to 0.447	10.67 to 11.35
Diameter	0.168 to 0.193	4.27 to 4.90
Lead Size		
AWG #22 TCW	0.023 to 0.027	0.584 to 0.686
Lead Length	1.30 Min.	33.02 Min.

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature -55°C to +125°C

Maximum Power Dissipation at 90°C

Series 1944: 0.385 W
Series 1945: 0.330 W

Packaging Tape & reel: 12" reel, 2500 pieces max.;
14" reel, 3000 pieces max. For additional packaging options, see technical section.

Made in the U.S.A.

DASH NUMBER*
 MIL DASH # (Ref.)
 INDUCTANCE (µH)
 TOLERANCE
 INDUCTANCE TEST FREQUENCY (MHz)
 Q-TEST FREQUENCY (MHz)
 Q MINIMUM
 SRF MINIMUM (MHz)
 DC RESISTANCE MAXIMUM (OHMS)
 CURRENT RATING MAXIMUM (mA)

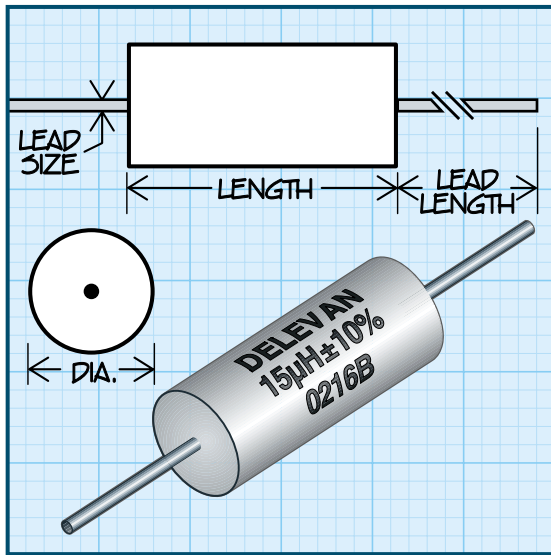
MS21389 (reference) – SERIES 1944 PHENOLIC CORE									
Dash	Mil Dash	Inductance (µH)	Tolerance	Inductance Test Freq (MHz)	Q-Test Freq (MHz)	Q Min	SRF Min (MHz)	DC Res Max (Ω)	Current Rating (mA)
-01M	1	0.10 ± 20%	25	50	75	400	0.020	4000	
-02M	2	0.12 ± 20%	25	50	75	400	0.025	3500	
-03M	3	0.15 ± 20%	25	50	75	400	0.030	3000	
-04M	4	0.18 ± 20%	25	50	65	400	0.030	3000	
-05M	5	0.22 ± 20%	25	50	65	400	0.030	3000	
-06M	6	0.27 ± 20%	25	45	65	376	0.040	2700	
-07M	7	0.33 ± 20%	25	40	65	352	0.045	2500	
-08M	8	0.39 ± 20%	25	40	60	320	0.070	2000	
-09M	9	0.47 ± 20%	25	25	55	288	0.070	2000	
-10M	10	0.56 ± 20%	25	25	50	264	0.100	1700	
-11M	11	0.68 ± 20%	25	25	50	240	0.120	1500	
-12M	12	0.82 ± 20%	25	25	45	220	0.160	1300	
-13M	13	1.00 ± 20%	25	20	45	200	0.230	1100	
-14M	14	1.20 ± 20%	7.9	20	45	176	0.280	1000	
-15K	15	1.50 ± 10%	7.9	15	45	160	0.380	850	
-16K	16	1.80 ± 10%	7.9	15	45	144	0.540	720	
-17K	17	2.20 ± 10%	7.9	15	45	132	0.750	610	
MS21390 (reference) – SERIES 1945 IRON CORE									
Dash	Mil Dash	Inductance (µH)	Tolerance	Inductance Test Freq (MHz)	Q-Test Freq (MHz)	Q Min	SRF Min (MHz)	DC Res Max (Ω)	Current Rating (mA)
-01K	1	2.70 ± 10%	7.9	10	55	88	0.11	1600	
-02K	2	3.30 ± 10%	7.9	10	55	80	0.14	1400	
-03K	3	3.90 ± 10%	7.9	10	60	76	0.19	1200	
-04K	4	4.70 ± 10%	7.9	7.9	70	72	0.28	1000	
-05K	5	5.60 ± 10%	7.9	7.9	65	64	0.34	900	
-06K	6	6.80 ± 10%	7.9	7.9	65	56	0.43	800	
-07K	7	8.20 ± 10%	7.9	7.9	60	52	0.56	720	
-08K	8	10.0 ± 10%	7.9	5.0	60	48	0.67	650	
-09K	9	12.0 ± 10%	2.5	5.0	65	42.4	0.81	590	
-10K	10	15.0 ± 10%	2.5	2.5	80	37.6	1.15	500	
-11K	11	18.0 ± 10%	2.5	2.5	75	34.4	1.40	460	
-12K	12	22.0 ± 10%	2.5	2.5	75	32.0	1.60	430	
-13J	13	27.0 ± 5%	2.5	2.5	75	28.8	2.30	360	
-14J	14	33.0 ± 5%	2.5	2.5	85	25.6	3.30	300	
-15J	15	39.0 ± 5%	2.5	2.5	80	20.8	3.32	290	
-16J	16	47.0 ± 5%	2.5	2.5	80	17.6	3.70	275	
-17J	17	56.0 ± 5%	2.5	2.5	75	15.2	3.99	265	
-18J	18	68.0 ± 5%	2.5	2.5	75	12.8	4.48	250	
-19J	19	82.0 ± 5%	2.5	2.5	75	10.4	5.07	235	
-20J	20	100 ± 5%	2.5	1.5	75	8.00	5.78	220	
-21J	21	120 ± 5%	0.79	0.79	65	5.76	5.00	170	
-22J	22	150 ± 5%	0.79	0.79	65	5.36	5.80	164	
-23J	23	180 ± 5%	0.79	0.79	65	5.04	6.60	158	
-24J	24	220 ± 5%	0.79	0.79	65	4.72	7.40	155	
-25J	25	270 ± 5%	0.79	0.79	65	4.48	8.00	150	
-26J	26	300 ± 5%	0.79	0.79	65	4.24	8.60	145	
-27J	27	330 ± 5%	0.79	0.79	65	4.00	8.90	142	
-28J	28	360 ± 5%	0.79	0.79	65	3.76	9.60	137	
-29J	29	390 ± 5%	0.79	0.79	65	3.60	9.90	135	
-30J	30	430 ± 5%	0.79	0.79	65	3.44	10.4	131	
-31J	31	470 ± 5%	0.79	0.79	65	3.20	10.9	128	
-32J	32	510 ± 5%	0.79	0.79	65	3.04	11.6	124	
-33J	33	560 ± 5%	0.79	0.79	60	2.88	11.8	123	
-34J	34	620 ± 5%	0.79	0.79	60	2.80	12.5	120	
-35J	35	680 ± 5%	0.79	0.79	60	2.72	13.5	115	
-36J	36	750 ± 5%	0.79	0.79	60	2.64	14.0	113	
-37J	37	820 ± 5%	0.79	0.79	60	2.48	15.0	110	
-38J	38	910 ± 5%	0.79	0.79	60	2.40	15.5	107	
-39J	39	1000 ± 5%	0.79	0.79	60	2.24	16.5	104	

Optional Tolerances: K = 10% J = 5% H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Molded Unshielded RF Coils



Military Specifications

MS90542 (LT4K); MS14052(LT10K)

Physical Parameters

	Inches	Millimeters
Length	0.560 ± .0010	14.22 ± 0.25
Diameter	0.220 ± 0.010	5.59 ± 0.25
Lead Size		
AWG #22 TCW	0.025 ± 0.002	0.635 ± 0.051
Lead Length	1.44 ± 0.12	36.58 ± 3.05

Current Rating at 90°C Ambient

LT4K 35°C Rise
LT10K 15°C Rise

Operating Temperature

LT4K -55°C to +125°C
LT10K -55°C to +105°C

Maximum Power Dissipation at 90°C

LT4K .427 W
LT10K .183 W

Weight Max. (Grams) 1.5

Packaging Tape & reel: 12" reel, 1000 pieces max.; 14" reel, 1500 pieces max. For additional packaging options, see technical section.

Made in the U.S.A.

DASH NUMBER*	MIL DASH #	INDUCTANCE (µH) ± 10%	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (mA)
MS90542- SERIES 2150 PHENOLIC CORE (LT4K)							
-00K	1	0.47	65	25.0	300	0.06	2270
-01K	2	0.56	65	25.0	270	0.07	2100
-02K	3	0.68	65	25.0	240	0.08	1960
-03K	4	0.82	65	25.0	220	0.11	1670
-04K	5	1.00	65	25.0	200	0.14	1480
-05K	6	1.20	40	7.9	180	0.19	1270
-06K	7	1.50	40	7.9	160	0.28	1050
-07K	8	1.80	40	7.9	150	0.37	915
-08K	9	2.20	40	7.9	135	0.50	785
-10K	10	2.70	40	7.9	120	0.65	690
-12K	11	3.30	40	7.9	105	1.00	555
-14K	12	3.90	40	7.9	100	1.20	505
-16K	13	4.70	40	7.9	90	1.80	415
MS14052- SERIES 2150 IRON CORE (LT10K)							
-18K	1	5.60	35	7.9	55	0.13	1040
-20K	2	6.80	35	7.9	50	0.20	835
-22K	3	8.20	35	7.9	44	0.22	795
-24K	4	10.0	35	7.9	42	0.26	735
-26K	5	12.0	45	2.5	34	0.45	560
-28K	6	15.0	45	2.5	32	0.52	520
-30K	7	18.0	50	2.5	28	0.70	445
-32K	8	22.0	60	2.5	24	1.00	375
-34K	9	27.0	60	2.5	22	1.30	330
-36K	10	33.0	60	2.5	20	1.50	305
-38K	11	39.0	70	2.5	18	2.00	264

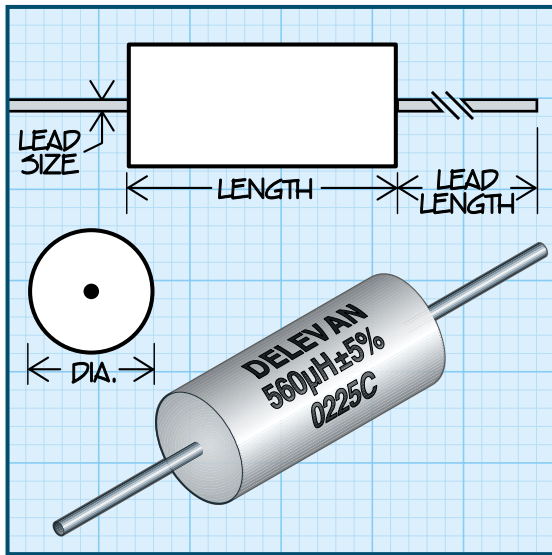
Parts listed above are QPL/MIL qualified

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Molded Unshielded RF Coils



Military Specifications MS90539 (LT10K);
MS90540 (LT10K); MS90541 (LT10K);
● No MS # Issued

Physical Parameters

Mold Size	A	B	C
Length			
Inches ± .010	0.440	0.560	0.740
mm ± .25	11.18	14.22	18.80
Diameter			
Inches ± .010	0.190	0.215	0.240
mm ± .25	4.83	5.46	6.10
Lead Type & Size			
AWG #	#22	#21	#20
TCW ± .002 Inches	0.025	0.028	0.032
[TCW ± .051 mm]	0.635	0.711	0.813
Lead Length			
Inches ± .12	1.44	1.44	1.44
mm ± 3.05	36.58	36.58	36.58
Maximum Power Dissipation			
at 90°C W	0.166	0.182	0.213
Weight Max.			
(Grams)	0.95	1.5	2.5

Current Rating at 90°C Ambient 15°C Rise

Operating Temperature Range -55°C to +105°C

Core Material Iron (LT10K)

Packaging Tape & reel: Mold sizes "A" and "C": 12" reel, 2500 pieces max.; 14" reel, 3000 pieces max. Mold size "B": 12" reel, 1000 pieces max.; 14" reel, 1500 pieces max. For additional packaging options, see technical section.

Made in the U.S.A.

DASH NUMBER*

MIL DASH #

INDUCTANCE (pH) ± 5%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAXIMUM (mA)

MOLD SIZE

MS90539 • SERIES 2500 IRON CORE (LT10K)

-00J	1	270	65	0.790	5.60	8.2	126	A
-02J	2	300	65	0.790	5.3	8.7	122	A
-04J	3	330	65	0.790	5.0	9.1	120	A
-06J	4	360	65	0.790	4.7	9.6	115	A
-08J	5	390	65	0.790	4.5	10.0	114	A
-10J	6	430	65	0.790	4.3	10.6	111	A
-12J	7	470	65	0.790	4.0	11.0	108	A
-14J	●	500	65	0.790	3.7	11.3	106	A
-15J	8	510	65	0.790	3.8	11.6	105	A
-16J	9	560	65	0.790	3.6	12.3	104	A
-18J	10	620	60	0.790	3.5	13.0	101	A
-20J	11	680	60	0.790	3.4	13.7	97	A
-22J	12	750	60	0.790	3.3	14.4	95	A
-24J	13	820	60	0.790	3.1	15.1	92	A
-26J	14	910	60	0.790	2.9	15.8	91	A
-28J	15	1000	60	0.790	2.8	16.5	88	A

MS90540 • SERIES 2500 IRON CORE (LT10K)

-30J	1	1100	60	0.250	2.8	21.0	81	B
-32J	2	1200	60	0.250	2.7	22.0	79	B
-34J	3	1300	60	0.250	2.6	23.0	78	B
-36J	4	1500	65	0.250	2.4	25.0	76	B
-38J	5	1600	65	0.250	2.3	26.0	74	B
-40J	6	1800	65	0.250	2.2	28.0	71	B
-42J	7	2000	65	0.250	2.1	29.0	69	B
-44J	8	2200	70	0.250	2.0	30.0	68	B
-46J	9	2400	70	0.250	1.9	31.0	67	B
-48J	10	2700	70	0.250	1.8	33.0	65	B
-50J	11	3000	70	0.250	1.7	35.0	63	B
-52J	12	3300	70	0.250	1.6	38.0	61	B
-54J	13	3600	70	0.250	1.5	40.0	59	B

MS90541 • SERIES 2500 IRON CORE (LT10K)

-56J	1	3900	80	0.250	1.45	44.0	62	C
-58J	2	4300	80	0.250	1.40	46.0	60	C
-60J	3	4700	80	0.250	1.35	48.0	59	C
-62J	4	5000	80	0.250	1.30	50.0	58	C
-63J	●	5100	80	0.250	1.30	50.0	58	C
-64J	5	5600	80	0.250	1.25	53.0	56	C
-66J	6	6200	80	0.250	1.20	56.0	55	C
-68J	7	6800	80	0.250	1.15	59.0	54	C
-70J	8	7500	80	0.250	1.10	62.0	52	C
-72J	9	8200	80	0.250	1.05	65.0	51	C
-74J	10	9100	80	0.250	1.0	68.0	49	C
-76J	11	10000	80	0.250	0.95	72.0	48	C

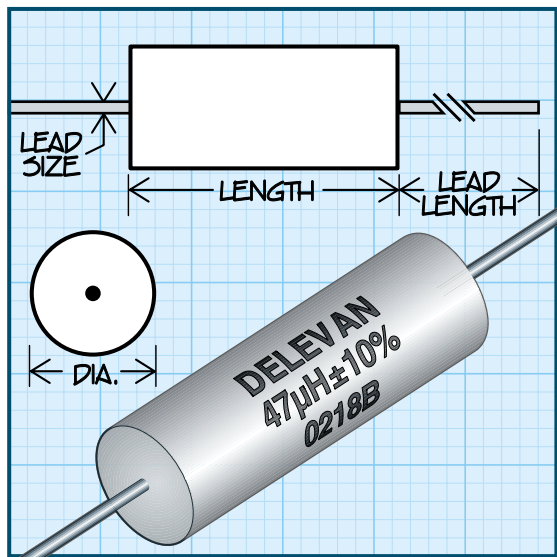
Parts listed above are QPL/MIL qualified

Optional Tolerances: H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Molded Unshielded RF Coils



Military Specifications

MS91189 (LT4K); MS75103(LT10K)

Physical Parameters

	Inches	Millimeters
Length	0.900 ± 0.010	22.86 ± 0.25
Diameter	0.280 ± 0.010	7.11 ± 0.25
Lead Size		
AWG #21 TCW	0.028 ± 0.002	0.711 ± 0.051
Lead Length	1.44 ± 0.12	36.58 ± 3.05

Current Rating at 90°C Ambient

LT4K 35°C Rise
LT10K 15°C Rise

Operating Temperature Range

LT4K -55°C to +125°C
LT10K -55°C to +105°C

Maximum Power Dissipation at 90°C

LT4K 0.598 W
LT10K 0.256 W

Weight Max. (Grams) 3.9

Packaging Tape & reel: 12" reel, 800 pieces max.;
14" reel, 1300 pieces max. For additional packaging
options, see technical section.

Made in the U.S.A.

	DASH NUMBER*	MIL DASH #	INDUCTANCE (µH) ±10%	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (mA)
MS91189- SERIES 2890 PHENOLIC CORE (LT4K)								
-00K	14	1.2	60	7.9	170	0.075	2400	
-02K	15	1.5	60	7.9	160	0.090	2190	
-03K	16	1.8	60	7.9	140	0.135	1790	
-04K	17	2.2	60	7.9	125	0.160	1640	
-06K	18	2.7	60	7.9	115	0.220	1400	
-08K	19	3.3	60	7.9	100	0.305	1190	
-10K	20	3.9	60	7.9	95	0.450	980	
-12K	21	4.7	60	7.9	90	0.560	880	
-14K	22	5.6	60	7.9	80	0.745	760	
-16K	23	6.8	60	7.9	75	1.05	640	
-18K	24	8.2	60	7.9	68	1.40	555	
-20K	25	10.0	60	7.9	60	1.90	475	
-22K	26	12.0	40	2.5	53	2.65	405	
-24K	27	15.0	40	2.5	50	3.25	365	
-26K	28	18.0	40	2.5	45	4.15	320	
MS75103- SERIES 2890 IRON CORE (LT10K)								
-28K	1	22.0	50	2.5	24	0.295	815	
-30K	2	27.0	45	2.5	22	0.35	750	
-32K	3	33.0	60	2.5	19	0.55	595	
-34K	4	39.0	55	2.5	18	0.65	550	
-36K	5	47.0	65	2.5	16	1.00	445	
-38K	6	56.0	65	2.5	14	1.15	410	
-39K	7	68.0	75	2.5	13	1.85	325	
-40K	8	82.0	75	2.5	12	2.10	305	
-42K	9	100.0	75	2.5	12	2.50	279	
-44K	10	120.0	95	0.79	10	4.10	219	

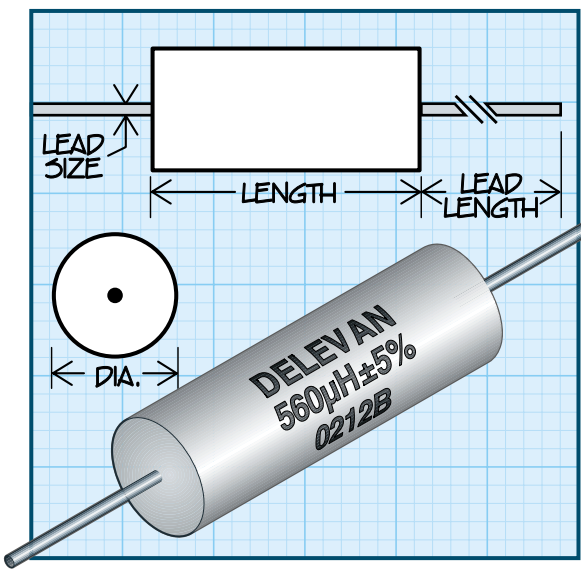
Parts listed above are QPL/MIL qualified

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Molded Unshielded RF Coils



Physical Parameters

	Inches	Millimeters
Length	0.880 to 0.910	22.35 to 23.11
Diameter	0.270 to 0.310	6.86 to 7.87
Lead Size		
AWG #21 TCW	0.0260 to .0305	0.66 to 0.77
Lead Length	1.30 Min.	33.02 Min.

Operating Temperature -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C 0.540 W

Test Methods MIL-PRF-15305 test methods, only. MS21380-01 to MS21380-49, reference.

Packaging Tape & reel: 12" reel, 800 pieces max.; 14" reel, 1300 pieces max. For additional packaging options, see technical section.

Made in the U.S.A.

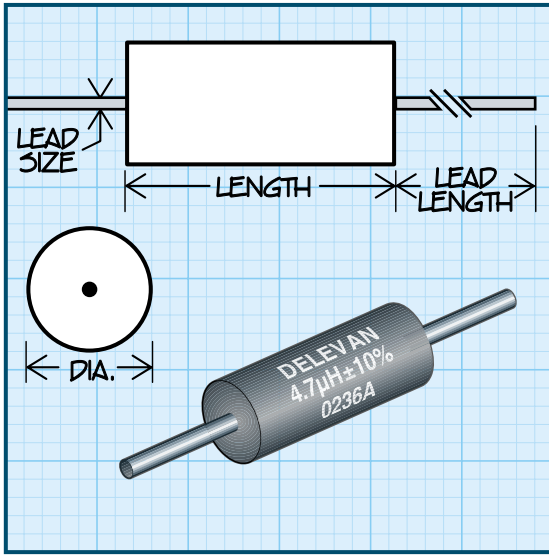
	DASH NUMBER*	MIL DASH # (Ref.)	INDUCTANCE (µH)	TOLERANCE	INDUCTANCE TEST FREQUENCY (MHz)	Q TEST FREQUENCY (MHz)	Q MINIMUM	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (ma)
MS21380 (Reference) - SERIES 4470 IRON CORE										
-01K	1	1.0	± 10%	25.0	15.0	130	136.0	0.03	4000	
-02K	2	1.2	± 10%	7.9	15.0	130	124.0	0.03	4000	
-03K	3	1.5	± 10%	7.9	10.0	130	112.0	0.03	4000	
-04K	4	1.8	± 10%	7.9	10.0	130	100.0	0.03	4000	
-05K	5	2.2	± 10%	7.9	10.0	130	92.0	0.04	3500	
-06K	6	2.7	± 10%	7.9	10.0	100	81.6	0.04	3500	
-07K	7	3.3	± 10%	7.9	7.9	100	72.0	0.04	3500	
-08K	8	3.9	± 10%	7.9	7.9	80	68.0	0.05	3100	
-09K	9	4.7	± 10%	7.9	7.9	75	64.0	0.05	3100	
-10K	10	5.6	± 10%	7.9	7.9	65	57.6	0.06	3000	
-11K	11	6.8	± 10%	7.9	7.9	65	52.0	0.06	3000	
-12K	12	8.2	± 10%	7.9	7.9	65	45.6	0.09	2400	
-13K	13	10.0	± 10%	7.9	5.0	75	40.0	0.15	1800	
-14K	14	12.0	± 10%	2.5	5.0	75	36.0	0.20	1600	
-15J	15	15.0	± 5%	2.5	5.0	75	32.0	0.30	1300	
-16J	16	18.0	± 5%	2.5	5.0	75	28.8	0.40	1150	
-17J	17	22.0	± 5%	2.5	2.5	75	25.6	0.50	1000	
-18J	18	27.0	± 5%	2.5	2.5	70	24.0	0.60	900	
-19J	19	33.0	± 5%	2.5	2.5	70	22.4	0.70	850	
-20J	20	39.0	± 5%	2.5	2.5	70	20.8	1.00	720	
-21J	21	47.0	± 5%	2.5	2.5	75	20.0	1.30	620	
-22J	22	56.0	± 5%	2.5	2.5	80	17.6	1.80	540	
-23J	23	68.0	± 5%	2.5	2.5	100	16.0	2.40	450	
-24J	24	82.0	± 5%	2.5	2.5	100	14.4	2.80	425	
-25J	25	100.0	± 5%	2.5	1.5	100	13.6	3.20	400	
-26J	26	120.0	± 5%	0.79	1.5	100	12.0	4.10	360	
-27J	27	150.0	± 5%	0.79	1.0	100	11.2	6.40	280	
-28J	28	180.0	± 5%	0.79	1.0	95	9.60	9.50	240	
-29J	29	220.0	± 5%	0.79	1.0	95	8.80	12.0	200	
-30J	30	270.0	± 5%	0.79	1.0	70	7.20	13.0	195	
-31J	31	330.0	± 5%	0.79	0.79	65	6.00	14.0	190	
-32J	32	390.0	± 5%	0.79	0.79	65	5.20	15.5	180	
-33J	33	470.0	± 5%	0.79	0.79	60	4.40	17.0	170	
-34J	34	560.0	± 5%	0.79	0.50	75	3.20	18.5	165	
-35J	35	680.0	± 5%	0.79	0.50	75	2.56	20.0	155	
-36J	36	820.0	± 5%	0.79	0.50	75	2.24	22.0	150	
-37J	37	1000.0	± 5%	0.79	0.50	75	1.92	24.0	145	
-38J	38	1200.0	± 5%	0.79	0.50	75	1.68	27.0	137	
-39J	39	1500.0	± 5%	0.79	0.40	75	1.52	29.0	130	
-40J	40	1800.0	± 5%	0.79	0.40	65	1.36	32.0	125	
-41J	41	2200.0	± 5%	0.25	0.25	65	1.20	35.0	120	
-42J	42	2700.0	± 5%	0.25	0.25	65	1.04	40.0	112	
-43J	43	3300.0	± 5%	0.25	0.25	65	0.96	45.0	105	
-44J	44	3900.0	± 5%	0.25	0.25	65	0.80	49.0	100	
-45J	45	4700.0	± 5%	0.25	0.25	65	0.76	53.0	95	
-46J	46	5600.0	± 5%	0.25	0.25	65	0.68	60.0	90	
-47J	47	6800.0	± 5%	0.25	0.25	65	0.60	67.0	85	
-48J	48	8200.0	± 5%	0.25	0.25	65	0.52	75.0	82	
-49J	49	10000.0	± 5%	0.25	0.15	65	0.47	80.0	80	

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Molded Shielded RF Coils



Military Specifications

MS21426 (LT10K); MS21427 (LT10K)

Physical Parameters

	Inches	Millimeters
Length	0.250 ± 0.010	6.35 ± 0.25
Diameter	0.095 ± 0.010	2.41 ± 0.25
Lead Size		
AWG #24 TCW	0.020 ± 0.0015	0.508 ± 0.038
Lead Length	1.5 ± 0.12	38.10 ± 3.05

Current Rating at 90°C Ambient 15°C Rise

Operating Temperature Range -55°C to +105°C

Maximum Power Dissipation at 90°C 0.0585 W

Weight Max. (Grams) 0.25

Incremental Current Current level which causes a Max. of 5% change in inductance.

Coupling 3% Max.

† Self Resonant Frequency (SRF) values are calculated and to be used for reference only.

Packaging Tape & reel: 12" reel, 3500 pieces max.; 14" reel, 6000 pieces max. For additional packaging options, see technical section.

Made in the U.S.A.

DASH NUMBER*
MIL DASH #
INDUCTANCE (µH) ±10%
Q MINIMUM
TEST FREQUENCY (MHz)
SRF MINIMUM (MHz)
DC RESISTANCE MAXIMUM (OHMS)
CURRENT RATING MAXIMUM (mA)
INCREMENTAL CURRENT (mA)

MS21426- SERIES 0925 IRON CORE & SLEEVE (LT10K)								
-101K	1	0.10	54	25.0	490.0†	0.10	670	670
-121K	2	0.12	52	25.0	430.0†	0.11	635	635
-151K	3	0.15	50	25.0	415.0†	0.12	610	610
-181K	4	0.18	49	25.0	375.0†	0.13	585	585
-221K	5	0.22	47	25.0	330.0†	0.15	545	545
-271K	6	0.27	46	25.0	300.0†	0.16	530	530
-331K	7	0.33	44	25.0	260.0†	0.18	495	495
-391K	8	0.39	42	25.0	230.0	0.19	485	485
-471K	9	0.47	41	25.0	220.0	0.21	460	460
-561K	10	0.56	41	25.0	210.0	0.23	440	440
-681K	11	0.68	39	25.0	180.0	0.24	430	430
-821K	12	0.82	38	25.0	165.0	0.27	405	405
-102K	13	1.00	37	25.0	150.0	0.30	385	385
-122K	14	1.20	40	7.9	130.0	0.73	247	247
-152K	15	1.50	41	7.9	115.0	0.86	228	228
-182K	16	1.80	43	7.9	105.0	0.95	217	217
-222K	17	2.20	45	7.9	95.0	1.10	202	202
-272K	18	2.70	48	7.9	90.0	1.20	193	193
-332K	19	3.30	49	7.9	80.0	1.30	185	185
-392K	20	3.90	50	7.9	75.0	1.50	173	173
-472K	21	4.70	53	7.9	70.0	2.40	136	136
-562K	22	5.60	54	7.9	60.0	2.90	124	124
-682K	23	6.80	55	7.9	55.0	3.20	118	118
-822K	24	8.20	55	7.9	53.0	3.60	111	111
-103K	25	10.0	57	7.9	50.0	4.00	106	106
-123K	26	12.0	36	2.5	35.0	3.00	122	122
-153K	27	15.0	38	2.5	30.0	3.40	115	115
-183K	28	18.0	40	2.5	26.0	3.80	108	108
-223K	29	22.0	40	2.5	24.0	4.90	96	96
-273K	30	27.0	40	2.5	21.0	5.80	88	88
-333K	31	33.0	41	2.5	20.0	6.50	83	83
-393K	32	39.0	42	2.5	19.0	7.90	75	75
-473K	33	47.0	44	2.5	16.0	9.30	69	69
-563K	34	56.0	44	2.5	15.0	11.0	64	64
-683K	35	68.0	45	2.5	13.0	12.0	61	61
-823K	36	82.0	45	2.5	11.0	13.0	59	59
-104K	37	100.0	40	2.5	10.5	16.8	51	51
MS21427- SERIES 0925 FERRITE CORE & SLEEVE (LT10K)								
-124K	1	120.0	31	0.79	13.0	5.80	88	27
-154K	2	150.0	33	0.79	12.0	7.90	75	24
-184K	3	180.0	33	0.79	11.0	9.40	69	22
-224K	4	220.0	35	0.79	10.0	11.0	64	20
-274K	5	270.0	37	0.79	9.0	12.0	61	18
-334K	6	330.0	40	0.79	8.0	16.0	53	16
-394K	7	390.0	38	0.79	7.8	21.0	46	14
-474K	8	470.0	36	0.79	7.5	24.0	43	13
-564K	9	560.0	36	0.79	7.0	28.0	40	12

Parts listed above are QPL/MIL qualified

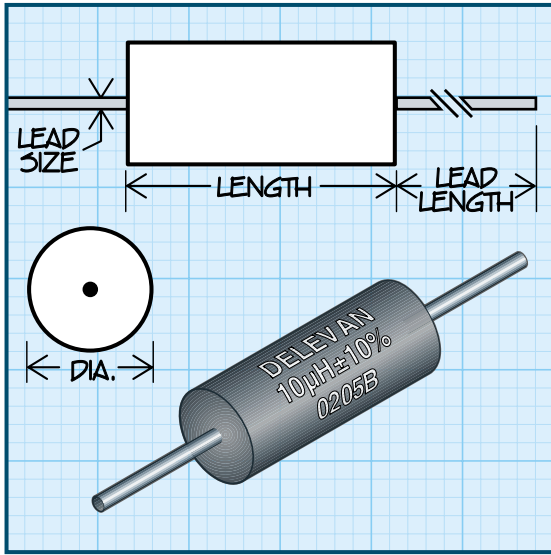
Optional Tolerances: J = 5% H = 3%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

RF INDUCTORS

Molded Shielded RF Coils



Military Specifications

MS75087 (LT10K); MS75088 (LT10K);
MS75089 (15µH to 1000µH only) (LT10K)

Physical Parameters

	Inches	Millimeters
Length	0.410 ± 0.020	10.41 ± 0.51
Diameter	0.162 ± 0.010	4.11 ± 0.25
Lead Size		
AWG #22 TCW	0.025 ± 0.002	0.635 ± 0.05
Lead Length	1.44 ± 0.12	36.58 ± 3.05

Current Rating at 90°C Ambient 15°C Rise

Operating Temperature Range -55°C to +105°C

Maximum Power Dissipation at 90°C 0.11 W

Weight Max. (Grams) 1.0

Incremental Current Current level which causes a Max. of 5% change in inductance.

Coupling 3% Max.

Packaging Tape & reel: 12" reel, 2500 pieces max.; 14" reel, 4000 pieces max. For additional packaging options, see technical section.

Made in the U.S.A.

MS75087- SERIES 1641 PHENOLIC CORE/IRON SLEEVE (LT10K)

DASH NUMBER*	MIL DASH #	INDUCTANCE (µH) ±10%	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (mA)	INCREMENTAL CURRENT (mA)
-101K	1	0.10	50	25.0	250.0	0.025	1830	1830
-121K	2	0.12	51	25.0	250.0	0.034	1570	1570
-151K	3	0.15	51	25.0	250.0	0.037	1500	1500
-181K	4	0.18	50	25.0	250.0	0.047	1330	1330
-221K	5	0.22	49	25.0	250.0	0.067	1120	1120
-271K	6	0.27	47	25.0	250.0	0.11	870	870
-331K	7	0.33	46	25.0	250.0	0.13	800	800
-391K	8	0.39	44	25.0	250.0	0.18	680	680
-471K	9	0.47	44	25.0	235.0	0.25	580	580
-561K	10	0.56	43	25.0	210.0	0.33	505	505
-681K	11	0.68	42	25.0	190.0	0.45	430	430
-821K	12	0.82	40	25.0	180.0	0.59	375	375

MS75088- SERIES 1641 IRON CORE & SLEEVE (LT10K)

-102K	1	1.0	44	25.0	140.0	0.07	1090	1090
-122K	2	1.2	44	7.9	130.0	0.10	900	900
-152K	3	1.5	44	7.9	115.0	0.12	835	835
-182K	4	1.8	44	7.9	105.0	0.14	775	775
-222K	5	2.2	44	7.9	100.0	0.19	665	665
-272K	6	2.7	44	7.9	92.0	0.28	545	545
-332K	7	3.3	44	7.9	85.0	0.35	490	490
-392K	8	3.9	44	7.9	75.0	0.40	455	455
-472K	9	4.7	44	7.9	70.0	0.55	390	390
-562K	10	5.6	44	7.9	65.0	0.72	340	340
-682K	11	6.8	50	7.9	55.0	1.02	285	285
-822K	12	8.2	50	7.9	50.0	1.32	250	250
-103K	13	10.0	50	7.9	46.0	1.62	228	228
-123K	14	12.0	55	2.5	44.0	2.00	205	205

MS75089- SERIES 1641 FERRITE CORE & SLEEVE (LT10K)

-153K	1	15.0	45	2.5	49.0	0.80	325	250
-183K	2	18.0	45	2.5	45.0	0.89	305	235
-223K	3	22.0	45	2.5	41.0	0.96	295	220
-273K	4	27.0	45	2.5	38.0	1.19	265	200
-333K	5	33.0	45	2.5	34.0	1.37	248	190
-393K	6	39.0	50	2.5	29.0	1.93	209	180
-473K	7	47.0	50	2.5	27.0	2.11	200	175
-563K	8	56.0	50	2.5	25.0	2.23	194	160
-683K	9	68.0	50	2.5	21.0	2.70	176	150
-823K	10	82.0	50	2.5	10.5	2.44	186	140
-104K	11	100.0	50	2.5	10.0	3.12	164	120
-124K	12	120.0	55	0.79	9.7	3.60	153	95
-154K	13	150.0	55	0.79	8.5	4.10	143	90
-184K	14	180.0	55	0.79	8.0	4.40	138	85
-224K	15	220.0	55	0.79	7.5	5.00	130	80
-274K	16	270.0	55	0.79	7.0	5.80	120	70
-334K	17	330.0	55	0.79	6.5	6.40	115	65
-394K	18	390.0	60	0.79	6.2	7.40	107	60
-474K	19	470.0	60	0.79	5.7	9.50	94	58
-564K	20	560.0	60	0.79	4.7	10.5	90	55
-684K	21	680.0	60	0.79	4.5	11.8	84	50
-824K	22	820.0	60	0.79	4.2	13.0	80	45
-105K	23	1000.0	60	0.79	3.8	17.5	70	40

See 4307 Series (page 53) for values above 1000µH.

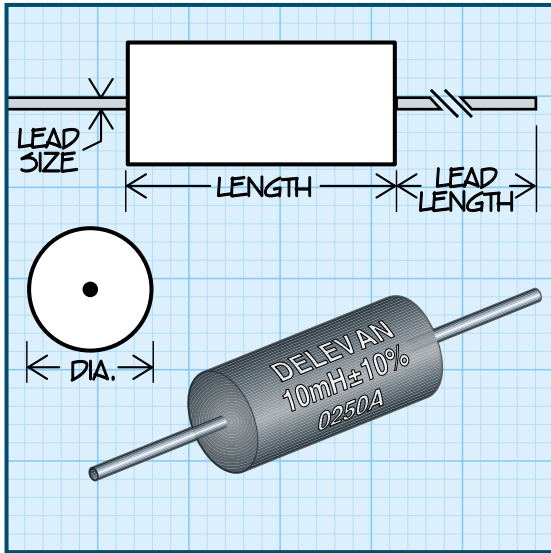
Parts listed above are QPL/MIL qualified

Optional Tolerances: J = 5% H = 3%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Molded Shielded RF Coils



Test Methods MIL-PRF-15305 test methods only. MS75089-24 to MS75089-40, reference; MS90537-50 to MS90537-66, reference.

Mechanical Configuration Units are axial leaded, encapsulated in an epoxy molded case. Core and sleeve are both of ferrite material.

Physical Parameters

	Inches	Millimeters
Length	0.427 to 0.447	10.85 to 11.35
Diameter	0.177 to 0.197	4.496 to 5.004
Lead Size		
AWG #22 TCW	0.023 to 0.027	0.584 to 0.686
Lead Length	1.320 to 1.560	33.53 to 39.62

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature -55°C to +125°C

Power Dissipation at 90°C 0.385 W

Coupling 3% Max.

**** Note** Incremental Current is the D.C. current required to decrease the inductance a maximum of 5%.

Packaging Tape & reel: 12" reel, 2500 pieces max.; 14" reel, 3000 pieces max. For additional packaging options, see technical section.

Made in the U.S.A.

DASH NUMBER*

INDUCTANCE
(μH) ±10%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAXIMUM (mA)

INCREMENTAL
CURRENT (mA) **

SERIES 4307 FERRITE CORE AND SLEEVE

-125K	1200	50	0.250	3.00	22.1	115	35
-155K	1500	50	0.250	2.80	26.5	110	33
-185K	1800	50	0.250	2.60	29.9	105	30
-225K	2200	50	0.250	2.40	33.8	99	27
-275K	2700	50	0.250	2.20	47.3	83	25
-335K	3300	50	0.250	2.00	53.0	80	22
-395K	3900	50	0.250	1.90	73.8	67	20
-475K	4700	50	0.250	1.70	81.6	63	19
-565K	5600	50	0.250	1.60	98.9	56	17
-685K	6800	50	0.250	1.40	111.0	54	16
-825K	8200	50	0.250	1.20	119.0	52	15
-106K	10000	50	0.250	1.00	137.0	49	14
-126K	12000	30	0.079	0.80	143.0	46	13
-156K	15000	30	0.079	0.60	157.0	45	12
-186K	18000	30	0.079	0.55	225.0	41	10
-226K	22000	27	0.079	0.50	274.0	33	9
-276K	27000	27	0.079	0.40	308.0	31	8
-336K	33000	27	0.079	0.40	343.0	29	7.5

Optional Tolerances: J = 5% H = 3%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

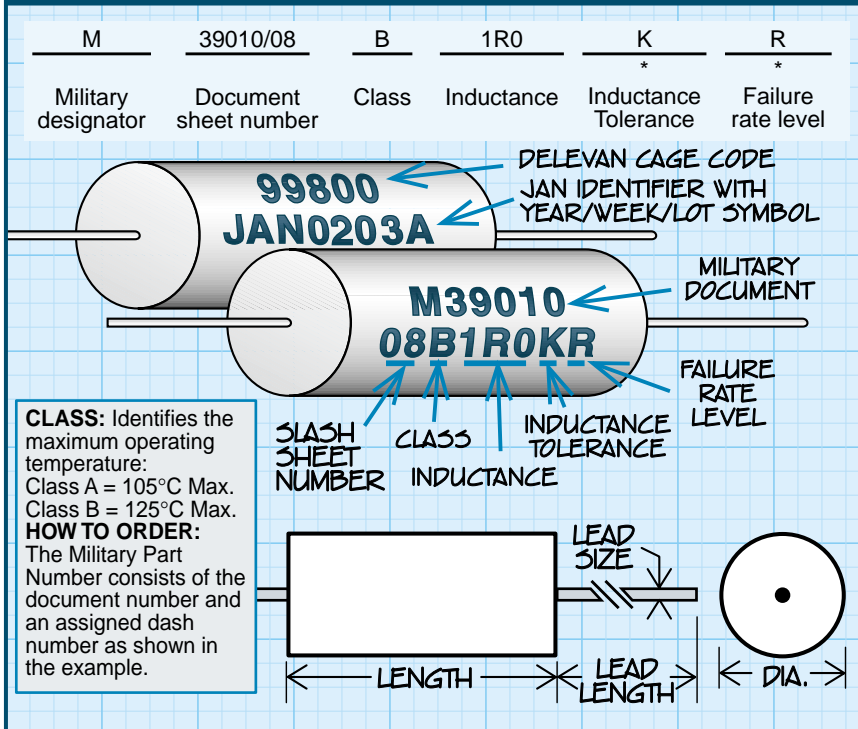


Established Reliability Inductors

RF INDUCTORS

Physical Parameters and Environmental Characteristics	ER1641			ER1840		ER1537		ER1025		
	MIL-PRF-39010/01	MIL-PRF-39010/02	MIL-PRF-39010/03	MIL-PRF-39010/04	MIL-PRF-39010/05	MIL-PRF-39010/06	MIL-PRF-39010/07	MIL-PRF-39010/08	MIL-PRF-39010/09	MIL-PRF-39010/10
Inductance Range, μH	0.10 to 0.82	0.91 to 12.0	15 to 1000	0.15 to 2.7	3.0 to 27.0	0.15 to 4.7	5.1 to 33	0.10 to 1.00	1.1 to 27.0	30 to 1000
Core Material	Phenolic	Iron	Ferrite	Phenolic	Iron	Phenolic	Iron	Phenolic	Iron	Ferrite
Sleeve	Iron	Iron	Ferrite	—	—	—	—	—	—	—
Length, Inches	0.410 ± 0.020	0.410 ± 0.020	0.410 ± 0.020	0.437 ± 0.01	0.437 ± 0.01	0.375 ± 0.010	0.375 ± 0.010	0.250 ± 0.010	0.250 ± 0.010	0.250 ± 0.010
Length, Millimeters	10.41 ± 0.51	10.41 ± 0.51	10.41 ± 0.51	11.10 ± 0.25	11.10 ± 0.25	9.53 ± 0.25	9.53 ± 0.25	6.35 ± 0.25	6.35 ± 0.25	6.35 ± 0.25
Diameter, Inches	0.162 ± 0.010	0.162 ± 0.010	0.162 ± 0.010	0.187 ± 0.010	0.187 ± 0.010	0.156 ± 0.010	0.156 ± 0.010	0.095 ± 0.010	0.095 ± 0.010	0.095 ± 0.010
Diameter, Millimeters	4.11 ± 0.25	4.11 ± 0.25	4.11 ± 0.25	4.75 ± 0.25	4.75 ± 0.25	3.96 ± 0.25	3.96 ± 0.25	2.41 ± 0.25	2.41 ± 0.25	2.41 ± 0.25
Lead Size — AWG #	#22 TCW	#22 TCW	#22 TCW	#22 TCW	#22 TCW	#22 TCW	#22 TCW	#24 TCW	#24 TCW	#24 TCW
Lead Size, Inches	0.025 ± 0.002	0.025 ± 0.002	0.025 ± 0.002	0.025 ± 0.002	0.025 ± 0.002	0.025 ± 0.002	0.025 ± 0.002	0.020 ± 0.0015	0.020 ± 0.0015	0.020 ± 0.0015
Lead Size, Millimeters	0.635 ± 0.051	0.635 ± 0.051	0.635 ± 0.051	0.635 ± 0.051	0.635 ± 0.051	0.635 ± 0.051	0.635 ± 0.051	0.51 ± 0.04	0.51 ± 0.04	0.51 ± 0.04
Lead Length, Inches	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188
Lead Length, Millimeters	36.53 ± 4.77	36.53 ± 4.77	36.53 ± 4.77	36.58 ± 3.05	36.58 ± 3.05	36.53 ± 4.77	36.53 ± 4.77	36.53 ± 4.77	36.53 ± 4.77	36.53 ± 4.77
Weight Max. (Grams)	0.85	1.0	1.0	0.95	0.95	0.9	0.9	0.3	0.3	0.3
Current Rating at 90°C, Max. Rise °C	15	15	15	35	15	35	15	35	15	15
Operating Temp. °C	-55 to +105	-55 to +105	-55 to +105	-55 to +125	-55 to +105	-55 to +125	-55 to +105	-55 to +125	-55 to +105	-55 to +105
Max. Power Dissipation at 90°C, Watts	0.11	0.11	0.11	0.385	0.385	0.312	0.134	0.21	0.09	0.073
Coupling	3% Max.	3% Max.	3% Max.	—	—	—	—	—	—	—
Body Color	Black	Black	Black	Tan	Tan	Tan	Tan	Tan	Tan	Tan

MARKING EXAMPLE & ORDERING INFORMATION



MIL-PRF-39010 Molded RF Coils with Sn10 high-temperature solder for internal connections. **Approved Through Failure Rate Level R**

Note The complete Military dash numbers will include two additional letters, indicated in the tables on the following three pages by **. The first additional letter will indicate tolerance: J indicates $\pm 5\%$; K indicates $\pm 10\%$; L indicates $\pm 20\%$.

The second letter will indicate the failure rate (e.g., M, P, R).

Packaging Tape & reel
ER1025: 12" reel, 3500 pieces max.; 14" reel, 6000 pieces max.
ER1537 and ER1641: 12" reel, 2500 pieces max.; 14" reel, 4000 pieces max.
ER1840: 12" reel, 2500 pieces max.; 14" reel, 3000 pieces max. For additional packaging options, see technical section.

Made in the U.S.A.

CONTINUED ON NEXT PAGE

DELEVAN PART NUMBER	MILITARY DASH NUMBER	INDUCTANCE (µH)	IND. TOLERANCE (%)	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAX. (OHMS @ 25°C)	RATED DC CURRENT (mA)
MIL-PRF-39010/01								
ER1641-101**	AR10**	0.10	5,10	50	25.0	250	0.025	1,790
ER1641-111**	AR11**	0.11	5	50	25.0	250	0.034	1,530
ER1641-121**	AR12**	0.12	5,10	50	25.0	250	0.034	1,530
ER1641-131**	AR13**	0.13	5	50	25.0	250	0.037	1,470
ER1641-151**	AR15**	0.15	5,10	50	25.0	250	0.037	1,470
ER1641-161**	AR16**	0.16	5	50	25.0	250	0.047	1,300
ER1641-181**	AR18**	0.18	5,10	50	25.0	250	0.047	1,300
ER1641-201**	AR20**	0.20	5	49	25.0	250	0.067	1,100
ER1641-221**	AR22**	0.22	5,10	49	25.0	250	0.067	1,100
ER1641-241**	AR24**	0.24	5	47	25.0	250	0.110	853
ER1641-271**	AR27**	0.27	5,10	47	25.0	250	0.110	853
ER1641-301**	AR30**	0.30	5	46	25.0	250	0.130	780
ER1641-331**	AR33**	0.33	5,10	46	25.0	250	0.130	780
ER1641-361**	AR36**	0.36	5	44	25.0	250	0.180	670
ER1641-391**	AR39**	0.39	5,10	44	25.0	250	0.180	670
ER1641-431**	AR43**	0.43	5	44	25.0	235	0.250	565
ER1641-471**	AR47**	0.47	5,10	44	25.0	235	0.250	565
ER1641-511**	AR51**	0.51	5	43	25.0	210	0.330	490
ER1641-561**	AR56**	0.56	5,10	43	25.0	210	0.330	490
ER1641-621**	AR62**	0.62	5	42	25.0	190	0.450	420
ER1641-681**	AR68**	0.68	5,10	42	25.0	190	0.450	420
ER1641-751**	AR75**	0.75	5	40	25.0	180	0.590	370
ER1641-821**	AR82**	0.82	5,10	40	25.0	180	0.590	370
MIL-PRF-39010/02								
ER1641-911**	AR91**	0.91	5	44	25.0	140	0.070	1,070
ER1641-102**	A1R0**	1.00	5,10	44	25.0	140	0.070	1,070
ER1641-112**	A1R1**	1.10	5	44	7.9	130	0.100	895
ER1641-122**	A1R2**	1.20	5,10	44	7.9	130	0.100	895
ER1641-132**	A1R3**	1.30	5	44	7.9	115	0.120	815
ER1641-152**	A1R5**	1.50	5,10	44	7.9	115	0.120	815
ER1641-162**	A1R6**	1.60	5	44	7.9	105	0.140	755
ER1641-182**	A1R8**	1.80	5,10	44	7.9	105	0.140	755
ER1641-202**	A2R0**	2.00	5	44	7.9	100	0.190	650
ER1641-222**	A2R2**	2.20	5,10	44	7.9	100	0.190	650
ER1641-242**	A2R4**	2.40	5	44	7.9	92	0.280	535
ER1641-272**	A2R7**	2.70	5,10	44	7.9	92	0.280	535
ER1641-302**	A3R0**	3.00	5	44	7.9	85	0.350	480
ER1641-332**	A3R3**	3.30	5,10	44	7.9	85	0.350	480
ER1641-362**	A3R6**	3.60	5	44	7.9	75	0.400	450
ER1641-392**	A3R9**	3.90	5,10	44	7.9	75	0.400	450
ER1641-432**	A4R3**	4.30	5	44	7.9	70	0.550	380
ER1641-472**	A4R7**	4.70	5,10	44	7.9	70	0.550	380
ER1641-512**	A5R1**	5.10	5	44	7.9	65	0.720	335
ER1641-562**	A5R6**	5.60	5,10	44	7.9	65	0.720	335
ER1641-622**	A6R2**	6.20	5	44	7.9	55	1.020	280
ER1641-682**	A6R8**	6.80	5,10	50	7.9	55	1.020	280
ER1641-752**	A7R5**	7.50	5	50	7.9	50	1.320	245
ER1641-822**	A8R2**	8.20	5,10	50	7.9	50	1.320	245
ER1641-912**	A9R1**	9.10	5	50	7.9	46	1.620	220
ER1641-103**	A100**	10.00	5,10	50	7.9	46	1.620	220
ER1641-113**	A110**	11.00	5	50	2.5	44	2.000	200
ER1641-123**	A120**	12.00	5,10	50	2.5	44	2.000	200
MIL-PRF-39010/03								
ER1641-153**	A150**	15	5,10	45	2.50	49.0	0.80	315
ER1641-163**	A160**	16	5	45	2.50	45.0	0.89	300
ER1641-183**	A180**	18	5,10	45	2.50	45.0	0.89	300
ER1641-203**	A200**	20	5	45	2.50	41.0	0.96	290
ER1641-223**	A220**	22	5,10	45	2.50	41.0	0.96	290
ER1641-243**	A240**	24	5	45	2.50	38.0	1.19	260
ER1641-273**	A270**	27	5,10	45	2.50	38.0	1.19	260
ER1641-303**	A300**	30	5	45	2.50	34.0	1.37	240
ER1641-333**	A330**	33	5,10	45	2.50	34.0	1.37	240
ER1641-363**	A360**	36	5	45	2.50	29.0	1.93	205
ER1641-393**	A390**	39	5,10	50	2.50	29.0	1.93	205
ER1641-433**	A430**	43	5	50	2.50	27.0	2.11	195

DELEVAN PART NUMBER	MILITARY DASH NUMBER	INDUCTANCE (µH)	IND. TOLERANCE (%)	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAX. (OHMS @ 25°C)	RATED DC CURRENT (mA)
MIL-PRF-39010/04								
ER1641-473**	A470**	47	5,10	50	2.50	27.0	2.11	195
ER1641-513**	A510**	51	5	50	2.50	25.0	2.23	190
ER1641-563**	A560**	56	5,10	50	2.50	25.0	2.23	190
ER1641-623**	A620**	62	5	50	2.50	21.0	2.44	180
ER1641-683**	A680**	68	5,10	50	2.50	21.0	2.44	180
ER1641-753**	A750**	75	5	50	2.50	10.5	2.70	170
ER1641-823**	A820**	82	5,10	50	2.50	10.5	2.70	170
ER1641-913**	A910**	91	5	50	2.50	10.0	3.12	160
ER1641-104**	A101**	100	5,10	50	2.50	10.0	3.12	160
ER1641-114**	A111**	110	5	50	0.79	9.7	3.60	150
ER1641-124**	A121**	120	5,10	55	0.79	9.7	3.60	150
ER1641-134**	A131**	130	5	55	0.79	8.5	4.10	140
ER1641-154**	A151**	150	5,10	55	0.79	8.5	4.10	140
ER1641-164**	A161**	160	5	55	0.79	8.0	4.40	135
ER1641-184**	A181**	180	5,10	55	0.79	8.0	4.40	135
ER1641-204**	A201**	200	5	55	0.79	7.5	5.00	125
ER1641-224**	A221**	220	5,10	55	0.79	7.5	5.00	125
ER1641-244**	A241**	240	5	55	0.79	7.0	5.80	115
ER1641-274**	A271**	270	5,10	55	0.79	7.0	5.80	115
ER1641-304**	A301**	300	5	55	0.79	6.5	6.40	110
ER1641-334**	A331**	330	5,10	55	0.79	6.5	6.40	110
ER1641-364**	A361**	360	5	55	0.79	6.2	7.40	105
ER1641-394**	A391**	390	5,10	60	0.79	6.2	7.40	105
ER1641-434**	A431**	430	5	60	0.79	5.7	9.50	92
ER1641-474**	A471**	470	5,10	60	0.79	5.7	9.50	92
ER1641-514**	A511**	510	5	60	0.79	4.7	10.50	90
ER1641-564**	A561**	560	5,10	60	0.79	4.7	10.50	90
ER1641-624**	A621**	620	5	60	0.79	4.5	11.80	80
ER1641-684**	A681**	680	5,10	60	0.79	4.5	11.80	80
ER1641-754**	A751**	750	5	60	0.79	4.2	13.00	80
ER1641-824**	A821**	820	5,10	60	0.79	4.2	13.00	80
ER1641-914**	A911**	910	5	60	0.79	3.8	17.50	70
ER1641-105**	A102**	1,000	5,10	60	0.79	3.8	17.50	70
MIL-PRF-39010/04								
ER1840-00**	BR15**	0.15	5,10,20	55	25.0	510	0.030	2,900
ER1840-101**	BR16**	0.16	5	50	25.0	415	0.035	2,700
ER1840-01**	BR18**	0.18	5,10	50	25.0	415	0.035	2,700
ER1840-102**	BR20**	0.20	5	50	25.0	415	0.035	2,700
ER1840-02**	BR22**	0.22	5,10,20	50	25.0	415	0.035	2,700
ER1840-103**	BR24**	0.24	5	50	25.0	350	0.065	2,000
ER1840-03**	BR27**	0.27	5,10	50	25.0	350	0.065	2,000
ER1840-104**	BR30**	0.30	5	50	25.0	350	0.065	2,000
ER1840-04**	BR33**	0.33	5,10,20	50	25.0	350	0.065	2,000
ER1840-105**	BR36**	0.36	5	50	25.0	300	0.085	1,700
ER1840-05**	BR39**	0.39	5,10	50	25.0	300	0.085	1,700
ER1840-106**	BR43**	0.43	5	50	25.0	300	0.085	1,700
ER1840-06**	BR47**	0.47	5,10,20	50	25.0	300	0.085	1,700
ER1840-107**	BR51**	0.51	5	50	25.0	270	0.125	1,450
ER1840-07**	BR56**	0.56	5,10	50	25.0	270	0.125	1,450
ER1840-108**	BR62**	0.62	5	45	25.0	250	0.150	1,300
ER1840-08**	BR68**	0.68	5,10	45	25.0	250	0.150	1,300
ER1840-109**	BR75**	0.75	5	40	25.0	210	0.205	1,100
ER1840-09**	BR82**	0.82	5,10	40	25.0	210	0.205	1,100
ER1840-110**	BR91**	0.91	5	40	25.0	200	0.290	930
ER1840-10**	B1R0**	1.00	5,10	40	25.0	200	0.290	930
ER1840-111**	B1R1**	1.10	5	30	7.9	180	0.400	785
ER1840-11**	B1R2**	1.20	5,10	30	7.9	180	0.400	785
ER1840-112**	B1R3**	1.30	5	30	7.9	170	0.485	720
ER1840-12**	B1R5**	1.50	5,10	30	7.9	170	0.485	720
ER1840-113**	B1R6**	1.60	5	30	7.9	150	0.740	580
ER1840-13**	B1R8**	1.80	5,10	30	7.9	150	0.740	580
ER1840-114**	B2R0**	2.00	5	30	7.9	140	0.970	505
ER1840-14**	B2R2**	2.20	5,10	30	7.9	140	0.970	505
ER1840-15**	B2R4**	2.40	5	30	7.9	120	1.200	460
ER1840-16**	B2R7**	2.70	5,10	30	7.9	120	1.200	460

CONTINUED ON NEXT PAGE

DELEVAN
PART NUMBER

MILITARY
DASH NUMBER

INDUCTANCE (µH)

IND. TOLERANCE (%)

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAX. (OHMS @ 25°C)

RATED DC
CURRENT (mA)

DELEVAN
PART NUMBER

MILITARY
DASH NUMBER

INDUCTANCE (µH)

IND. TOLERANCE (%)

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAX. (OHMS @ 25°C)

RATED DC
CURRENT (mA)

MIL-PRF-39010/05

ER1840-17**	A3R0**	3.00	5	30	7.9	70	0.140	945
ER1840-18**	A3R3**	3.30	5,10	30	7.9	70	0.140	945
ER1840-19**	A3R6**	3.60	5	30	7.9	65	0.155	870
ER1840-20**	A3R9**	3.90	5,10	30	7.9	65	0.155	870
ER1840-21**	A4R3**	4.30	5	30	7.9	60	0.210	745
ER1840-22**	A4R7**	4.70	5,10	30	7.9	60	0.210	745
ER1840-23**	A5R1**	5.10	5	30	7.9	50	0.280	645
ER1840-24**	A5R6**	5.60	5,10	30	7.9	50	0.280	645
ER1840-25**	A6R2**	6.20	5	30	7.9	50	0.375	560
ER1840-26**	A6R8**	6.80	5,10	30	7.9	50	0.375	560
ER1840-27**	A7R5**	7.50	5	30	7.9	48	0.440	520
ER1840-28**	A8R2**	8.20	5,10	30	7.9	48	0.440	520
ER1840-29**	A9R1**	9.10	5	30	7.9	42	0.605	440
ER1840-30**	A100**	10.0	5,10	30	7.9	42	0.605	440
ER1840-31**	A110**	11.0	5	30	2.5	36	1.05	335
ER1840-32**	A120**	12.0	5,10	50	2.5	36	1.05	335
ER1840-33**	A130**	13.0	5	50	2.5	30	1.20	310
ER1840-34**	A150**	15.0	5,10	55	2.5	30	1.20	310
ER1840-135**	A160**	16.0	5	55	2.5	30	1.95	245
ER1840-35**	A180**	18.0	5,10	60	2.5	30	1.95	245
ER1840-136**	A200**	20.0	5	60	2.5	24	2.20	230
ER1840-36**	A220**	22.0	5,10	60	2.5	24	2.20	230
ER1840-37**	A240**	24.0	5	60	2.5	22	2.75	205
ER1840-38**	A270**	27.0	5,10	65	2.5	22	2.75	205

MIL-PRF-39010/06

ER1537-00**	BR15**	0.15	5,10,20	50	25.0	525	0.030	2,450
ER1537-101**	BR16**	0.16	5	50	25.0	460	0.055	1,810
ER1537-01**	BR18**	0.18	5,10	50	25.0	460	0.055	1,810
ER1537-102**	BR20**	0.20	5	50	25.0	460	0.055	1,810
ER1537-02**	BR22**	0.22	5,10,20	50	25.0	460	0.055	1,810
ER1537-103**	BR24**	0.24	5	45	25.0	360	0.090	1,400
ER1537-03**	BR27**	0.27	5,10	45	25.0	360	0.090	1,400
ER1537-104**	BR30**	0.30	5	45	25.0	360	0.090	1,400
ER1537-04**	BR33**	0.33	5,10,20	45	25.0	360	0.090	1,400
ER1537-105**	BR36**	0.36	5	45	25.0	310	0.12	1,225
ER1537-05**	BR39**	0.39	5,10	45	25.0	310	0.12	1,225
ER1537-106**	BR43**	0.43	5	45	25.0	310	0.12	1,225
ER1537-06**	BR47**	0.47	5,10,20	45	25.0	310	0.12	1,225
ER1537-107**	BR51**	0.51	5	45	25.0	280	0.135	1,150
ER1537-07**	BR56**	0.56	5,10	50	25.0	280	0.135	1,150
ER1537-108**	BR62**	0.62	5	50	25.0	250	0.150	1,100
ER1537-08**	BR68**	0.68	5,10	50	25.0	250	0.150	1,100
ER1537-09**	BR75**	0.75	5	50	25.0	220	0.220	900
ER1537-10**	BR82**	0.82	5,10	50	25.0	220	0.220	900
ER1537-11**	BR91**	0.91	5	50	25.0	200	0.290	785
ER1537-12**	B1R0**	1.00	5,10	50	25.0	200	0.290	785
ER1537-13**	B1R1**	1.10	5	33	7.9	180	0.420	650
ER1537-14**	B1R2**	1.20	5,10	33	7.9	180	0.420	650
ER1537-15**	B1R3**	1.30	5	33	7.9	160	0.500	600
ER1537-16**	B1R5**	1.50	5,10	33	7.9	160	0.500	600
ER1537-17**	B1R6**	1.60	5	33	7.9	150	0.650	525
ER1537-18**	B1R8**	1.80	5,10	33	7.9	150	0.650	525
ER1537-19**	B2R0**	2.00	5	33	7.9	135	0.950	435
ER1537-20**	B2R2**	2.20	5,10	33	7.9	135	0.950	435
ER1537-21**	B2R4**	2.40	5	33	7.9	120	1.20	385
ER1537-22**	B2R7**	2.70	5,10	33	7.9	120	1.20	385
ER1537-23**	B3R0**	3.00	5	33	7.9	110	2.00	300
ER1537-24**	B3R3**	3.30	5,10	33	7.9	110	2.00	300
ER1537-25**	B3R6**	3.60	5	33	7.9	100	2.30	280
ER1537-26**	B3R9**	3.90	5,10	33	7.9	100	2.30	280
ER1537-27**	B4R3**	4.30	5	33	7.9	90	2.60	260
ER1537-28**	B4R7**	4.70	5,10	33	7.9	90	2.60	260

MIL-PRF-39010/07

ER1537-29**	A5R1**	5.1	5	45	7.9	60	0.32	495
ER1537-30**	A5R6**	5.6	5,10	45	7.9	60	0.32	495
ER1537-31**	A6R2**	6.2	5	45	7.9	55	0.50	395
ER1537-32**	A6R8**	6.8	5,10	50	7.9	55	0.50	395
ER1537-33**	A7R5**	7.5	5	50	7.9	50	0.60	360
ER1537-34**	A8R2**	8.2	5,10	50	7.9	50	0.60	360
ER1537-35**	A9R1**	9.1	5	50	7.9	45	0.90	290
ER1537-36**	A100**	10.0	5,10	55	7.9	45	0.90	290
ER1537-37**	A110**	11.0	5	55	2.5	42	1.10	265
ER1537-38**	A120**	12.0	5,10	65	2.5	42	1.10	265
ER1537-39**	A130**	13.0	5	65	2.5	40	1.40	240
ER1537-40**	A150**	15.0	5,10	65	2.5	40	1.40	240
ER1537-41**	A160**	16.0	5	65	2.5	34	2.25	185
ER1537-42**	A180**	18.0	5,10	75	2.5	34	2.25	185
ER1537-43**	A200**	20.0	5	75	2.5	30	2.50	175
ER1537-44**	A220**	22.0	5,10	75	2.5	30	2.50	175
ER1537-46**	A240**	24.0	5	60	2.5	25	2.60	170
ER1537-48**	A270**	27.0	5,10	60	2.5	25	2.60	170
ER1537-50**	A300**	30.0	5	60	2.5	19	3.00	165
ER1537-52**	A330**	33.0	5,10	65	2.5	19	3.00	165

MIL-PRF-39010/08

ER1025-94**	BR10**	0.10	5,10	40	25.0	680	0.08	1,350
ER1025-95**	BR11**	0.11	5	40	25.0	640	0.09	1,270
ER1025-96**	BR12**	0.12	5,10	40	25.0	640	0.09	1,270
ER1025-97**	BR13**	0.13	5	38	25.0	600	0.10	1,200
ER1025-00**	BR15**	0.15	5,10	38	25.0	600	0.10	1,200
ER1025-01**	BR16**	0.16	5	35	25.0	550	0.12	1,105
ER1025-02**	BR18**	0.18	5,10	35	25.0	550	0.12	1,105
ER1025-03**	BR20**	0.20	5	33	25.0	510	0.14	1,025
ER1025-04**	BR22**	0.22	5,10	33	25.0	510	0.14	1,025
ER1025-05**	BR24**	0.24	5	33	25.0	430	0.16	960
ER1025-06**	BR27**	0.27	5,10	33	25.0	430	0.16	960
ER1025-07**	BR30**	0.30	5	30	25.0	410	0.22	815
ER1025-08**	BR33**	0.33	5,10	30	25.0	410	0.22	815
ER1025-09**	BR36**	0.36	5	30	25.0	365	0.30	700
ER1025-10**	BR39**	0.39	5,10	30	25.0	365	0.30	700
ER1025-11**	BR43**	0.43	5	30	25.0	330	0.35	650
ER1025-12**	BR47**	0.47	5,10	30	25.0	330	0.35	650
ER1025-13**	BR51**	0.51	5	30	25.0	300	0.50	545
ER1025-14**	BR56**	0.56	5,10	30	25.0	300	0.50	545
ER1025-15**	BR62**	0.62	5	28	25.0	275	0.60	495
ER1025-16**	BR68**	0.68	5,10	28	25.0	275	0.60	495
ER1025-17**	BR75**	0.75	5	28	25.0	250	0.85	415
ER1025-18**	BR82**	0.82	5,10	28	25.0	250	0.85	415
ER1025-19**	BR91**	0.91	5	25	25.0	230	1.00	385
ER1025-20**	B1R0**	1.00	5,10	25	25.0	230	1.00	385

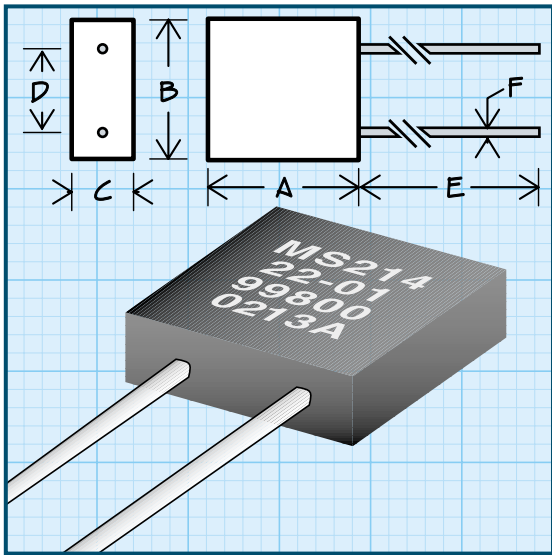
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MIL-PRF-39010/09								
DELEVAN PART NUMBER	MILITARY DASH NUMBER	INDUCTANCE (μH)	IND. TOLERANCE (%)	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAX. (OHMS @ 25°C)	RATED DC CURRENT (mA)
ER1025-21**	A1R1**	1.1	5	25	7.9	150	0.18	590
ER1025-22**	A1R2**	1.2	5,10	25	7.9	150	0.18	590
ER1025-23**	A1R3**	1.3	5	25	7.9	140	0.22	535
ER1025-24**	A1R5**	1.5	5,10	28	7.9	140	0.22	535
ER1025-25**	A1R6**	1.6	5	28	7.9	125	0.30	455
ER1025-26**	A1R8**	1.8	5,10	30	7.9	125	0.30	455
ER1025-27**	A2R0**	2.0	5	30	7.9	115	0.40	395
ER1025-28**	A2R2**	2.2	5,10	30	7.9	115	0.40	395
ER1025-29**	A2R4**	2.4	5	30	7.9	100	0.55	335
ER1025-30**	A2R7**	2.7	5,10	37	7.9	100	0.55	335
ER1025-31**	A3R0**	3.0	5	37	7.9	90	0.85	270
ER1025-32**	A3R3**	3.3	5,10	45	7.9	90	0.85	270
ER1025-33**	A3R6**	3.6	5	45	7.9	80	1.00	250
ER1025-34**	A3R9**	3.9	5,10	45	7.9	80	1.00	250
ER1025-35**	A4R3**	4.3	5	45	7.9	75	1.20	230
ER1025-36**	A4R7**	4.7	5,10	45	7.9	75	1.20	230
ER1025-37**	A5R1**	5.1	5	45	7.9	65	1.80	185
ER1025-38**	A5R6**	5.6	5,10	50	7.9	65	1.80	185
ER1025-39**	A6R2**	6.2	5	50	7.9	60	2.00	175
ER1025-40**	A6R8**	6.8	5,10	50	7.9	60	2.00	175
ER1025-41**	A7R5**	7.5	5	50	7.9	55	2.70	155
ER1025-42**	A8R2**	8.2	5,10	55	7.9	55	2.70	155
ER1025-43**	A9R1**	9.1	5	55	7.9	50	3.70	130
ER1025-44**	A100**	10.0	5,10	55	7.9	50	3.70	130
ER1025-45**	A110**	11.0	5	45	2.5	40	2.70	130
ER1025-46**	A120**	12.0	5,10	45	2.5	40	2.70	155
ER1025-47**	A130**	13.0	5	40	2.5	35	2.80	150
ER1025-48**	A150**	15.0	5,10	40	2.5	35	2.80	150
ER1025-49**	A160**	16.0	5	40	2.5	30	3.10	145
ER1025-50**	A180**	18.0	5,10	50	2.5	30	3.10	145
ER1025-51**	A200**	20.0	5	50	2.5	25	3.30	140
ER1025-52**	A220**	22.0	5,10	50	2.5	25	3.30	140
ER1025-53**	A240**	24.0	5	50	2.5	20	3.50	135
ER1025-54**	A270**	27.0	5,10	50	2.5	20	3.50	135

MIL-PRF-39010/10								
DELEVAN PART NUMBER	MILITARY DASH NUMBER	INDUCTANCE (μH)	IND. TOLERANCE (%)	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAX. (OHMS @ 25°C)	RATED DC CURRENT (mA)
ER1025-55**	A300**	30.0	5	45	2.50	24	3.4	130
ER1025-56**	A330**	33.0	5,10	45	2.50	24	3.4	130
ER1025-57**	A360**	36.0	5	45	2.50	22	3.6	125
ER1025-58**	A390**	39.0	5,10	45	2.50	22	3.6	125
ER1025-59**	A430**	43.0	5	45	2.50	20	4.5	110
ER1025-60**	A470**	47.0	5,10	45	2.50	20	4.5	110
ER1025-61**	A510**	51.0	5	45	2.50	18	5.7	100
ER1025-62**	A560**	56.0	5,10	45	2.50	18	5.7	100
ER1025-63**	A620**	62.0	5	45	2.50	15	6.7	92
ER1025-64**	A680**	68.0	5,10	50	2.50	15	6.7	92
ER1025-65**	A750**	75.0	5	50	2.50	14	7.3	88
ER1025-66**	A820**	82.0	5,10	50	2.50	14	7.3	88
ER1025-67**	A910**	91.0	5	50	2.50	13	8.0	84
ER1025-68**	A101**	100	5,10	50	2.50	13	8.0	84
ER1025-69**	A111**	110	5	30	0.79	12	13.0	66
ER1025-70**	A121**	120	5,10	30	0.79	12	13.0	66
ER1025-71**	A131**	130	5	30	0.79	11	15.0	61
ER1025-72**	A151**	150	5,10	30	0.79	11	15.0	61
ER1025-73**	A161**	160	5	30	0.79	10	17.0	57
ER1025-74**	A181**	180	5,10	30	0.79	10	17.0	57
ER1025-75**	A201**	200	5	30	0.79	9.0	21.0	52
ER1025-76**	A221**	220	5,10	30	0.79	9.0	21.0	52
ER1025-77**	A241**	240	5	30	0.79	8.0	25.0	47
ER1025-78**	A271**	270	5,10	30	0.79	8.0	25.0	47
ER1025-79**	A301**	300	5	30	0.79	7.0	28.0	45
ER1025-80**	A331**	330	5,10	30	0.79	7.0	28.0	45
ER1025-81**	A361**	360	5	30	0.79	6.5	35.0	40
ER1025-82**	A391**	390	5,10	30	0.79	6.5	35.0	40
ER1025-83**	A431**	430	5	30	0.79	6.0	42.0	36
ER1025-84**	A471**	470	5,10	30	0.79	6.0	42.0	36
ER1025-85**	A511**	510	5	30	0.79	5.0	46.0	35
ER1025-86**	A561**	560	5,10	30	0.79	5.0	46.0	35
ER1025-87**	A621**	620	5	30	0.79	4.0	60.0	30
ER1025-88**	A681**	680	5,10	30	0.79	4.0	60.0	30
ER1025-89**	A751**	750	5	30	0.79	3.8	65.0	29
ER1025-90**	A821**	820	5,10	30	0.79	3.8	65.0	29
ER1025-91**	A911**	910	5	30	0.79	3.4	72.0	28
ER1025-92**	A102**	1,000	5,10	30	0.79	3.4	72.0	28

Radial Toroidal Inductors

RF INDUCTORS



Military Specifications MS-21422 (LT4K)

Physical Parameters

	Inches	Millimeters
A	0.200 to 0.230	5.08 to 5.84
B	0.190 to 0.210	4.83 to 5.33
C	0.090 to 0.110	2.29 to 2.79
D	0.090 to 0.110	2.29 to 2.79
E	1.00 Min.	25.40 Min.
F	0.0185 to 0.0215	0.47 to 0.55

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature Range -55°C to +125°C

Maximum Power Dissipation at 90°C 0.2 W

Weight Max. (Grams) 0.5

Core Material Iron

Lead Size AWG #24 TCW

Note Inductance measured .25" from body

Packaging Bulk only

Made In the U.S.A.

DASH NUMBER*

MIL DASH #

INDUCTANCE (µH)

TOLERANCE

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAXIMUM (mA)

MS21422- SERIES 2020 IRON CORE (LT4K)

-00K	1	0.10	±10%	55	25.0	450	0.04	2200
-02K	2	0.12	±10%	60	25.0	400	0.05	2000
-04K	3	0.15	±10%	60	25.0	350	0.06	1800
-06K	4	0.18	±10%	60	25.0	320	0.07	1600
-08K	5	0.22	±10%	65	25.0	300	0.08	1500
-10K	6	0.27	±10%	65	25.0	280	0.10	1400
-12K	7	0.33	±10%	65	25.0	260	0.11	1300
-14K	8	0.39	±10%	65	25.0	240	0.14	1200
-16K	9	0.47	±10%	65	25.0	220	0.17	1100
-18K	10	0.56	±10%	70	25.0	200	0.22	1000
-20K	11	0.68	±10%	70	25.0	180	0.27	900
-22K	12	0.82	±10%	70	25.0	160	0.30	800
-24J	13	1.0	±5%	70	25.0	150	0.35	750
-26J	14	1.2	±5%	60	7.9	130	0.40	700
-28J	15	1.5	±5%	60	7.9	120	0.50	630
-30J	16	1.8	±5%	60	7.9	110	0.70	530
-32J	17	2.2	±5%	60	7.9	100	0.90	470
-34J	18	2.7	±5%	60	7.9	90	1.1	420
-36J	19	3.3	±5%	60	7.9	70	1.3	390
-38J	20	3.9	±5%	60	7.9	60	1.5	360
-40J	21	4.7	±5%	60	7.9	50	1.8	330
-42J	22	5.6	±5%	60	7.9	45	2.0	310
-44J	23	6.8	±5%	60	7.9	40	2.2	300
-46J	24	8.2	±5%	60	7.9	37	2.4	290
-48J	25	10.0	±5%	60	7.9	35	2.6	280

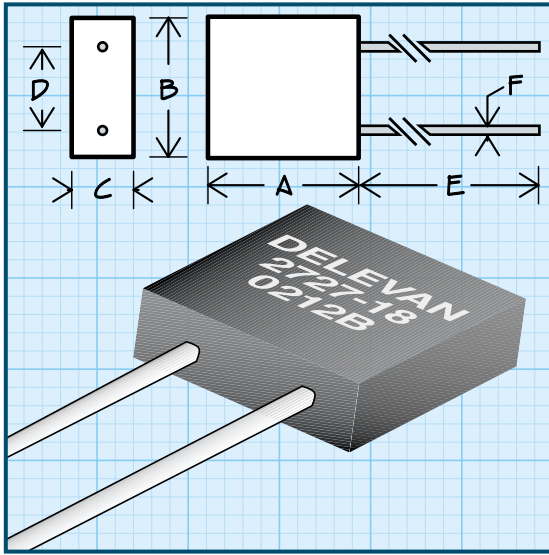
Parts listed above are QPL/MIL qualified

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Radial Toroidal Inductors



Military Specification MS-21424 REF.

Physical Parameters

	Inches	Millimeters
A	0.270 to 0.300	6.86 to 7.62
B	0.260 to 0.280	6.60 to 7.11
C	0.140 to 0.160	3.56 to 4.06
D	0.190 to 0.210	4.83 to 5.33
E	1.00 Min.	25.40 Min.
F	0.023 to 0.027	0.584 to 0.686

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature -55°C to +125°C

Maximum Power Dissipation at 90°C 0.33 W

Core Material Iron

Weight Max. (Grams) 1.0

Lead Size AWG #22 TCW

Packaging Bulk only

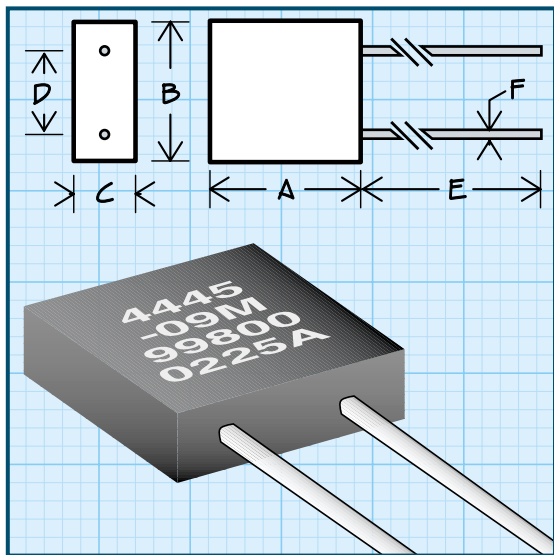
Made in the U.S.A.

SERIES 2727 IRON CORE						
DASH NUMBER*	INDUCTANCE (μH) @ ±5%	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (mA)
-01J	10.0	75	2.5	35	1.1	420
-02J	12.0	75	2.5	31	1.3	385
-03J	15.0	75	2.5	27	1.5	360
-04J	18.0	80	2.5	24	1.9	320
-05J	22.0	80	2.5	22	2.3	290
-06J	27.0	80	2.5	20	2.7	265
-07J	33.0	80	2.5	18	3.3	240
-08J	39.0	80	2.5	16	3.9	220
-09J	47.0	80	2.5	14	4.7	200
-10J	56.0	80	2.5	12	5.6	185
-11J	68.0	80	2.5	11	6.8	165
-12J	82.0	80	2.5	10	8.1	155
-13J	100.0	80	2.5	9.1	9.7	140
-14J	120.0	45	0.79	8.2	12	125
-15J	150.0	45	0.79	7.3	14	115
-16J	180.0	45	0.79	6.4	17	105
-17J	220.0	50	0.79	5.6	20	96
-18J	270.0	55	0.79	5.0	24	90
-19J	330.0	55	0.79	4.4	19	100
-20J	390.0	55	0.79	3.9	22	93
-21J	470.0	55	0.79	3.5	27	84
-22J	560.0	55	0.79	3.1	32	77
-23J	680.0	55	0.79	2.8	19	100
-24J	820.0	50	0.79	2.5	23	92
-25J	1000.0	50	0.79	2.2	27	84

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Radial Toroidal Inductors



Military Specification MS-21423 (ref.)

Mechanical Configuration Units are radial leaded and encapsulated in an epoxy molded package.

Physical Parameters

	Inches	Millimeters
A	0.200 to 0.230	5.08 to 5.84
B	0.190 to 0.210	4.83 to 5.33
C	0.090 to 0.110	2.29 to 2.79
D	0.090 to 0.110	2.29 to 2.79
E	1.00 Min.	25.4 Min.
F	0.0185 to 0.0215	0.470 to 0.546

Operating Temperature -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C 0.200 W

Note Inductance measured 0.25" from body.

Weight Max. (Grams) 0.5

Packaging Bulk only

Made in the U.S.A.

****Note:** Self Resonant Frequency (SRF) values above 250 MHz are calculated and for reference only.

DASH NUMBER*

MIL DASH # (Ref.)

INDUCTANCE (µH)

TOLERANCE

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)**

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAXIMUM (mA)

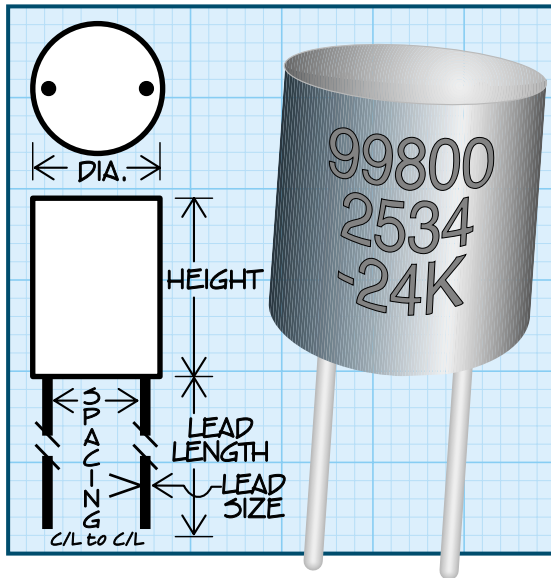
MS21423 (Ref.) - SERIES 4445								
-01M	1	0.010	± 20%	60	150	1000	0.020	3000
-02M	2	0.012	± 20%	60	150	1000	0.020	3000
-03M	3	0.015	± 20%	60	150	1000	0.020	3000
-04M	4	0.018	± 20%	60	150	1000	0.020	3000
-05M	5	0.022	± 20%	60	100	900	0.020	3000
-06M	6	0.027	± 20%	60	100	800	0.020	3000
-07M	7	0.033	± 20%	60	100	750	0.020	3000
-08M	8	0.039	± 20%	60	100	700	0.020	3000
-09M	9	0.047	± 20%	60	100	650	0.020	3000
-10M	10	0.056	± 20%	60	100	600	0.020	3000
-11M	11	0.068	± 20%	60	100	550	0.030	2500
-12M	12	0.082	± 20%	60	100	500	0.040	2200
-13K	13	0.100	± 10%	80	50	450	0.040	2200
-14K	14	0.120	± 10%	80	50	400	0.050	2000
-15K	15	0.150	± 10%	80	50	350	0.060	1800
-16K	16	0.180	± 10%	80	50	320	0.070	1600
-17K	17	0.220	± 10%	80	50	300	0.080	1500
-18K	18	0.270	± 10%	80	50	280	0.100	1400
-19K	19	0.330	± 10%	80	50	260	0.120	1300
-20K	20	0.390	± 10%	80	50	240	0.150	1150
-21K	21	0.470	± 10%	80	50	220	0.200	1000
-22K	22	0.560	± 10%	70	50	200	0.250	900
-23K	23	0.680	± 10%	70	50	180	0.300	800
-24K	24	0.820	± 10%	70	50	160	0.350	750
-25K	25	1.000	± 10%	70	50	150	0.400	700

Optional Tolerances: J = 5% H = 3% G = 2%
(Dash 01-12 Min. Tolerance is ±5%)

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Molded Unshielded RF Coils



Physical Parameters

	Inches	Millimeters
Height	0.345 Max.	8.76 Max.
Diameter	0.25 ± 0.010	6.35 ± 0.25
Lead Size		
AWG #24 TCW	0.020 ± 0.0015	0.508 ± .0038
Lead Length	1.62 ± 0.12	41.15 ± 3.05
Lead Spacing	0.170 to 0.210	4.32 to 5.33

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature Range -55°C to +125°C

Maximum Power Dissipation at 90°C 0.23 W

Weight Max. (Grams) 1.0

Core Material Ferrite

Packaging Bulk only

Made in the U.S.A.

DASH NUMBER*

INDUCTANCE (mH)

TOLERANCE

Q MINIMUM

TEST FREQUENCY (KHz)

SRF MINIMUM (MHz)

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAXIMUM (mA)

SERIES 2534 FERRITE CORE

-00K	0.10	± 10%	100	790	4.0	1.5	330
-02K	0.12	± 10%	95	790	3.3	1.8	300
-04K	0.15	± 10%	90	790	3.2	2.0	285
-06K	0.18	± 10%	85	790	2.8	2.2	277
-08K	0.22	± 10%	90	790	2.5	2.4	265
-10K	0.27	± 10%	95	790	2.3	3.2	229
-12K	0.33	± 10%	90	790	2.2	3.4	220
-14K	0.39	± 10%	80	790	2.0	4.1	203
-16K	0.47	± 10%	70	790	1.9	4.5	193
-18K	0.56	± 10%	65	790	1.8	4.8	187
-20K	0.68	± 10%	65	790	1.7	5.4	175
-22K	0.82	± 10%	65	790	1.6	5.8	170
-24K	1.00	± 10%	65	790	1.4	6.4	160
-26K	1.20	± 10%	95	250	1.2	10.0	130
-28K	1.50	± 10%	90	250	1.15	12.0	118
-30K	1.80	± 10%	90	250	1.10	14.0	110
-32K	2.20	± 10%	90	250	0.95	17.0	100
-34K	2.70	± 10%	90	250	0.86	20.0	90
-36K	3.30	± 10%	90	250	0.80	24.0	85
-38K	3.90	± 10%	85	250	0.68	27.0	80
-40K	4.70	± 10%	85	250	0.64	34.0	70
-42K	5.60	± 10%	80	250	0.60	37.0	68
-44K	6.80	± 10%	75	250	0.50	45.0	61
-46K	8.20	± 10%	65	250	0.47	48.0	59
-48K	10.0	± 10%	45	250	0.42	51.0	58
-50L	12.0	± 15%	40	79	0.41	100.0	41
-52L	15.0	± 15%	45	79	0.32	105.0	40
-54L	18.0	± 15%	45	79	0.30	120.0	37
-56L	22.0	± 15%	45	79	0.25	145.0	34
-58L	27.0	± 15%	45	79	0.24	195.0	29
-60L	33.0	± 15%	45	79	0.21	250.0	26
-62L	39.0	± 15%	40	79	0.20	295.0	23
-64L	47.0	± 15%	40	79	0.18	365.0	21.5
-66L	56.0	± 15%	40	79	0.17	430.0	19.5
-68L	68.0	± 15%	30	79	0.15	510.0	18.0
-70L	82.0	± 15%	30	79	0.14	605.0	16.6
-72L	100.0	± 15%	30	79	0.12	670.0	15.8
-74L	120.0	± 15%	30	50	0.11	900.0	13.5
-76L	150.0	± 15%	25	50	0.10	1100.0	12.0

Optional Tolerances: J = 5% H = 3%

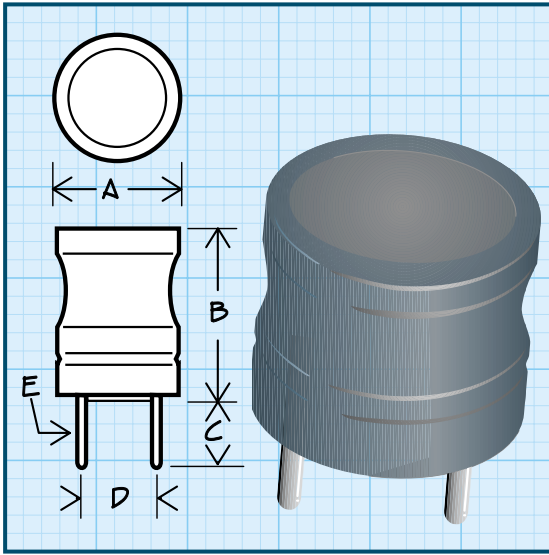
*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Series **4554R & 4564R**
4554 & 4564



Radial Lead Inductors



Physical Parameters

Series 4554

	Inches	Millimeters
A	0.34 Max.	8.64 Max.
B	0.433 Max.	11 Max.
C	0.200 Nom.	5.0 Nom.
D	0.200 Nom.	5.0 Nom.
E	0.024 Nom.	0.61 Nom.

Series 4564

	Inches	Millimeters
A	0.315 Max.	8.0 Max.
B	0.440 Max.	11.2 Max.
C	0.200 Nom.	5.0 Nom.
D	0.200 Nom.	5.0 Nom.
E	0.028 Nom.	0.71 Nom.

Operating Temperature Range

Series 4554 -40°C to +85°C

Series 4564 -20°C to +80°C

Storage Temperature Range

Series 4554 -40°C to +85°C

Series 4564 -40°C to +80°C

The Rated DC Current The amperage where the inductance value decreases 10%.

****Note: Series 4554 Inductance Tolerance**

Available in J = 5% in values 100µH only

Packaging Bulk

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

DASH NUMBER*

INDUCTANCE**

TOLERANCE (%)

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE MAXIMUM (OHMS)

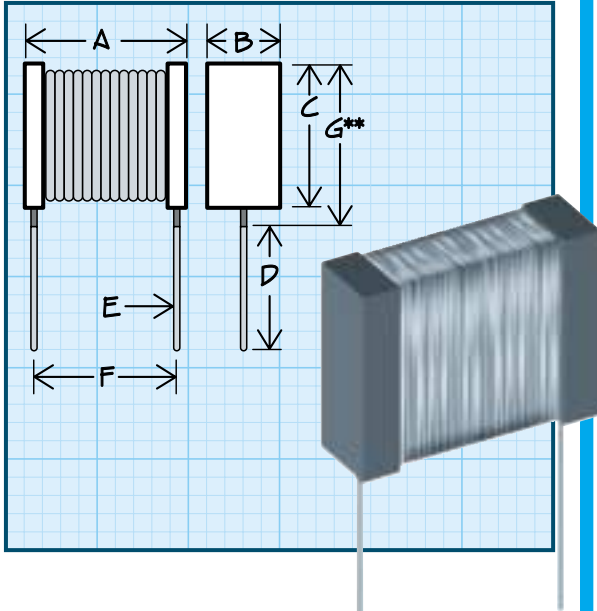
CURRENT RATING MAXIMUM (A)

SERIES 4554							
-1R0M	1.0 µH	±20%	20	7.96	150.0	0.013	10.0
-1R5M	1.5 µH	±20%	20	7.96	130.0	0.016	8.5
-2R2M	2.2 µH	±20%	20	7.96	100.0	0.021	6.5
-3R3M	3.3 µH	±20%	20	7.96	79.0	0.025	5.5
-4R7M	4.7 µH	±20%	20	7.96	51.0	0.030	4.3
-6R8M	6.8 µH	±20%	20	7.96	29.0	0.035	3.7
-100K	10 µH	±10%	50	2.52	14.0	0.055	3.0
-120K	12 µH	±10%	50	2.52	13.0	0.060	2.6
-150K	15 µH	±10%	50	2.52	12.0	0.065	2.2
-180K	18 µH	±10%	40	2.52	11.0	0.085	2.0
-220K	22 µH	±10%	40	2.52	9.2	0.095	1.7
-270K	27 µH	±10%	40	2.52	8.5	0.120	1.6
-330K	33 µH	±10%	30	2.52	7.8	0.140	1.5
-390K	39 µH	±10%	30	2.52	6.9	0.160	1.4
-470K	47 µH	±10%	30	2.52	6.5	0.200	1.3
-560K	56 µH	±10%	30	2.52	5.4	0.210	1.2
-680K	68 µH	±10%	30	2.52	4.9	0.210	1.2
-820K	82 µH	±10%	30	2.52	4.1	0.230	1.1
-101K	100 µH**	±10%	20	0.796	3.7	0.290	0.91
-121K	120 µH**	±10%	20	0.796	3.4	0.320	0.84
-151K	150 µH**	±10%	20	0.796	3.2	0.450	0.75
-181K	180 µH**	±10%	20	0.796	2.8	0.580	0.69
-221K	220 µH**	±10%	20	0.796	2.7	0.650	0.64
-271K	270 µH**	±10%	20	0.796	2.4	0.800	0.57
-331K	330 µH**	±10%	20	0.796	2.3	0.900	0.54
-391K	390 µH**	±10%	20	0.796	2.1	1.0	0.48
-471K	470 µH**	±10%	20	0.796	1.9	1.1	0.46
-561K	560 µH**	±10%	20	0.796	1.8	1.4	0.41
-681K	680 µH**	±10%	20	0.796	1.6	1.6	0.38
-821K	820 µH**	±10%	20	0.796	1.5	1.8	0.35
-102K	1000 µH**	±10%	50	0.252	1.3	2.9	0.29

SERIES 4564							
-101K	0.10 mH	±10%	80	0.796	5.3	2.0	0.20
-121K	0.12 mH	±10%	80	0.796	4.5	2.0	0.20
-151K	0.15 mH	±10%	80	0.796	3.8	2.0	0.20
-181K	0.18 mH	±10%	80	0.796	3.3	3.0	0.20
-221K	0.22 mH	±10%	80	0.796	2.9	3.0	0.20
-271K	0.27 mH	±10%	80	0.796	2.6	3.0	0.20
-331K	0.33 mH	±10%	80	0.796	2.3	4.0	0.20
-391K	0.39 mH	±10%	80	0.796	2.1	4.0	0.20
-471K	0.47 mH	±10%	80	0.796	1.9	4.0	0.20
-561K	0.56 mH	±10%	80	0.796	1.7	4.0	0.20
-681K	0.68 mH	±10%	80	0.796	1.6	4.0	0.20
-821K	0.82 mH	±10%	80	0.796	1.4	6.0	0.20
-102K	1.00 mH	±10%	90	0.252	1.3	6.0	0.15
-122K	1.20 mH	±10%	90	0.252	1.2	9.0	0.15
-152K	1.50 mH	±10%	90	0.252	1.1	9.0	0.15
-182K	1.80 mH	±10%	90	0.252	1.0	9.0	0.10
-222K	2.20 mH	±10%	90	0.252	0.9	13.0	0.10
-272K	2.70 mH	±10%	90	0.252	0.8	13.0	0.10
-332K	3.30 mH	±10%	90	0.252	0.7	13.0	0.10
-392K	3.90 mH	±10%	90	0.252	0.7	13.0	0.05
-472K	4.70 mH	±10%	90	0.252	0.6	18.0	0.05
-562K	5.60 mH	±10%	90	0.252	0.6	18.0	0.05
-682K	6.80 mH	±10%	90	0.252	0.5	26.0	0.05
-822K	8.20 mH	±10%	90	0.252	0.5	26.0	0.05
-103K	10.0 mH	±10%	100	0.0796	0.4	40.0	0.04
-123K	12.0 mH	±10%	100	0.0796	0.4	40.0	0.04
-153K	15.0 mH	±10%	100	0.0796	0.4	60.0	0.04
-183K	18.0 mH	±10%	100	0.0796	0.3	60.0	0.03
-223K	22.0 mH	±10%	100	0.0796	0.3	80.0	0.03
-273K	27.0 mH	±10%	100	0.0796	0.2	80.0	0.03
-333K	33.0 mH	±10%	100	0.0796	0.2	80.0	0.03

Series 4564: Optional Tolerances: J = 5%

Radial Leaded Inductors



Physical Parameters

	Inches	Millimeters
A	0.374 to 0.400	9.50 to 10.16
B	0.165 Max.	4.19 Max.
C	0.310 Max.	7.87 Max.
D	0.750 Min.	19.05 Min.
E	0.020 Typical	0.50 Typical
F	0.300 Typical	7.62 Typical
G **	0.400 Max.	10.16 Max.

** Clean Lead to Clean Lead

Mechanical Configuration Radial leaded ferrite coil

Operating Temperature -55°C to +125°C

Incremental Current The DC Current at which the inductance will be decreased by 5% maximum from the zero DC value

Maximum Rated Current Based on 40°C temperature rise from 85°C ambient

Maximum Power Dissipation 0.200 watts at 85°C

Inductance Tolerance Suffix letter listed in API Part Number table: M = +/- 20%; K = +/- 10%

Packaging Bulk only

DASH NUMBER*	INDUCTANCE (µH)	Q MIN.	L & Q TEST FREQUENCY (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (mA)	INCREMENTAL CURRENT (mA)
SERIES 4669						
-102M	1.00	40	7.90	0.010	3.60	7.00
-122M	1.20	40	7.90	0.012	3.30	6.00
-152M	1.50	40	7.90	0.015	3.00	5.00
-182M	1.80	40	7.90	0.020	2.55	4.80
-222M	2.20	40	7.90	0.025	2.30	4.40
-272M	2.70	40	7.90	0.028	2.15	4.00
-332M	3.30	40	7.90	0.036	1.90	3.70
-392M	3.90	40	7.90	0.050	1.60	3.40
-472M	4.70	40	7.90	0.055	1.55	3.20
-562M	5.60	35	7.90	0.090	1.40	2.80
-682M	6.80	35	7.90	0.110	1.10	2.60
-822M	8.20	35	7.90	0.115	1.05	2.20
-103K	10.0	35	7.90	0.120	1.04	2.10
-123K	12.0	50	2.50	0.140	0.95	2.00
-153K	15.0	50	2.50	0.155	0.91	1.60
-183K	18.0	50	2.50	0.180	0.85	1.50
-223K	22.0	50	2.50	0.230	0.75	1.40
-273K	27.0	50	2.50	0.265	0.70	1.30
-333K	33.0	50	2.50	0.345	0.61	1.20
-393K	39.0	50	2.50	0.370	0.59	1.10
-473K	47.0	40	2.50	0.500	0.51	1.00
-563K	56.0	40	2.50	0.685	0.44	0.95
-683K	68.0	50	2.50	0.885	0.38	0.90
-823K	82.0	55	2.50	1.200	0.33	0.85
-104K	100	50	2.50	1.495	0.29	0.80
-124K	120	70	0.79	1.725	0.27	0.65
-154K	150	70	0.79	1.955	0.25	0.60
-184K	180	70	0.79	2.070	0.24	0.55
-224K	220	70	0.79	2.185	0.23	0.50
-274K	270	70	0.79	2.530	0.22	0.45
-334K	330	70	0.79	3.335	0.20	0.41
-394K	390	70	0.79	3.450	0.19	0.39
-474K	470	70	0.79	5.290	0.16	0.35
-564K	560	70	0.79	5.405	0.15	0.32
-684K	680	65	0.79	5.930	0.14	0.29
-824K	820	60	0.79	6.325	0.14	0.27
-105K	1000	50	0.79	7.130	0.13	0.25
-125K	1200	70	0.25	10.00	0.11	0.21
-155K	1500	75	0.25	14.26	0.10	0.19
-185K	1800	80	0.25	15.76	0.09	0.17
-225K	2200	80	0.25	17.60	0.08	0.15
-275K	2700	80	0.25	19.32	0.08	0.14
-335K	3300	80	0.25	21.75	0.07	0.13
-395K	3900	70	0.25	26.00	0.07	0.12
-475K	4700	65	0.25	29.90	0.06	0.11

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Series

9405R & 9406R 9405 & 9406



Tunable Variable RF Coils

Leads AWG #24 Tinned Copperweld

Tuning Torque 0.1 to 3.5 oz. in.

Pin #1 is identified by white dot on 9406 only.

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature Range

-55°C to +125°C

Max. Power Dissipation at 90°C - 0.3 W

Weight Max. (Grams) 4.0

Units are electro-magnetically shielded

Core and Shield Material Ferrite

Ordering Information

Vertical Coil = Dash No. prefixed by 9405;

Horizontal Coil = Dash No. prefixed by 9406. Additionally – an electrostatic shield

for 9405 is available on a custom basis; order as 9415-XX

Packaging Bulk only

Made in the U.S.A.

DASH NUMBER*	NOMINAL INDUCTANCE (µH)	INDUCTANCE MINIMUM (µH)	INDUCTANCE MAXIMUM (µH)	TEST FREQUENCY (MHZ)	Q MINIMUM @ L MIN.	Q MINIMUM @ L MAX.	SRF MINIMUM (MHZ)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (mA)
-1	0.10	0.080	0.120	25.0	45	43	250.0	0.030	2690.0
-2	0.15	0.120	0.180	25.0	53	50	198.0	0.035	2490.0
-4	0.22	0.154	0.286	25.0	55	52	195.0	0.056	1970.0
-6	0.33	0.231	0.429	25.0	51	49	142.0	0.060	1900.0
-8	0.47	0.329	0.611	25.0	53	51	110.0	0.064	1840.0
-10	0.68	0.476	0.884	25.0	51	48	130.0	0.073	1720.0
-12	1.00	0.700	1.30	25/7.9	51	67	95.0	0.600	600.0
-14	1.50	1.05	1.95	7.9	55	82	76.0	0.620	590.0
-16	2.20	1.54	2.86	7.9	65	103	57.0	0.720	550.0
-18	3.30	2.31	4.29	7.9	70	91	39.0	1.05	455.0
-20	4.70	3.29	6.11	7.9	74	87	37.0	1.15	435.0
-22	6.80	4.76	8.84	7.9	72	88	27.0	1.30	410.0
-24	10.0	7.00	13.0	7.9/2.5	72	87	18.0	1.50	380.0
-26	15.0	10.5	19.5	2.5	66	93	16.0	2.35	305.0
-28	22.0	15.4	28.6	2.5	74	102	12.0	2.80	278.0
-30	33.0	23.1	42.9	2.5	83	110	11.0	3.00	269.0
-32	47.0	32.9	61.1	2.5	76	96	8.0	3.70	242.0
-34	68.0	47.6	88.4	2.5	70	73	7.0	4.35	223.0
-36	100.0	70.0	130.0	2.5/0.79	65	67	6.5	5.50	198.0
-38	150.0	105.0	195.0	0.79	53	81	4.5	9.20	153.0
-40	220.0	154.0	286.0	0.79	61	83	3.5	9.70	149.0
-42	330.0	231.0	429.0	0.79	42	57	3.2	14.0	124.0
-44	470.0	329.0	611.0	0.79	48	67	3.1	15.0	120.0
-46	680.0	476.0	884.0	0.79	45	57	2.4	20.0	104.0
-48	1000.0	700.0	1300.0	0.79/0.25	48	52	1.9	24.5	94.0
-50	1500.0	1050.0	1950.0	0.25	38	53	1.3	30.0	85.0
-52	2200.0	1540.0	2860.0	0.25	42	65	1.2	38.0	75.5
-54	3300.0	2310.0	4290.0	0.25	42	57	0.85	45.0	69.5
-56	4700.0	3290.0	6110.0	0.25	38	51	0.68	70.0	55.5
-58	6800.0	4760.0	8840.0	0.25	38	49	0.60	100.0	46.5
-60	10000.0	7000.0	13000.0	0.25/0.079	40	40	0.50	115.0	43.5

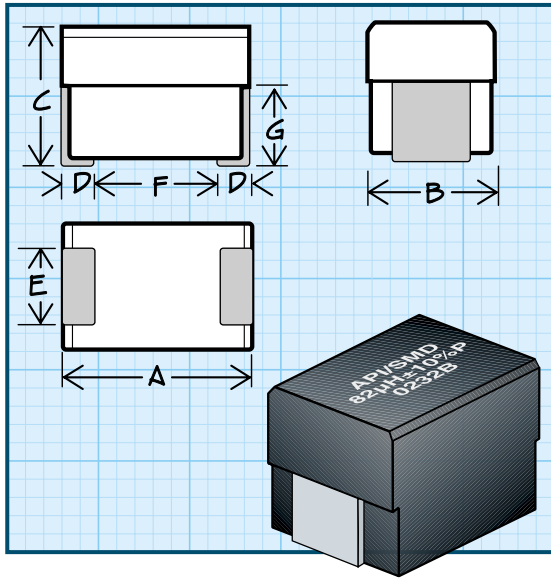
*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Physical Parameters

Dimension	A	B	C	D	E	F	G	H	J	K, L
In.	0.200 ± 0.010	0.020 ± 0.0015	0.187 ± 0.020	0.500 max.	0.380 max.	0.400 ± 0.020	0.500 max.	0.300 ± 0.010	0.187 ± 0.020	0.375 max.
mm	5.08 ± 0.25	0.508 ± 0.038	4.75 ± 0.51	12.7 max.	9.65 max.	10.16 ± 0.51	12.7 max.	7.62 ± 0.25	4.75 ± 0.51	9.53 max.

Surface Mount Power Inductors



Physical Parameters

	Inches	Millimeters
A	0.166 to 0.190	4.22 to 4.83
B	0.118 to 0.134	3.00 to 3.40
C	0.118 to 0.134	3.00 to 3.40
D	0.015 Min.	0.38 Min.
E	0.054 to 0.078	1.37 to 1.98
F	0.118 (Ref. only)	3.00 (Ref. only)
G	0.066 (Ref. only)	1.68 (Ref. only)

Dimensions "A" and "C" are over terminals

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C 0.278 W

Inductance Measured at 1V with no DC current

Incremental Current The current at which the inductance will be decreased by a maximum of 5% from its initial zero DC value.

Packaging Tape & reel (12mm): 7" reel, 650 pieces max.; 13" reel, 2500 pieces max.

Made In the U.S.A. Patent Protected

DASH NUMBER*

INDUCTANCE (µH)
±10% @ 1 KHz

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAX. (mA DC)

INCREMENTAL
CURRENT (mA DC)

SERIES P1812				
-102K	1.0	0.113	1050	2400
-122K	1.2	0.199	1000	2158
-152K	1.5	0.222	950	1980
-182K	1.8	0.240	900	1828
-222K	2.2	0.268	850	1697
-272K	2.7	0.288	800	1513
-332K	3.3	0.323	750	1397
-392K	3.9	0.347	700	1250
-472K	4.7	0.401	650	1131
-562K	5.6	0.437	650	1060
-682K	6.8	0.472	600	990
-822K	8.2	0.548	600	871
-103K	10	0.608	550	772
-123K	12	0.670	550	752
-153K	15	0.780	450	693
-183K	18	0.875	400	614
-223K	22	1.200	370	515
-273K	27	1.404	330	465
-333K	33	1.578	300	425
-393K	39	1.848	280	376
-473K	47	2.064	260	366
-563K	56	2.268	240	336
-683K	68	3.408	220	297
-823K	82	3.648	200	267
-104K	100	4.320	180	238
-124K	120	6.000	160	208
-154K	150	6.432	140	183
-184K	180	8.400	120	158
-224K	220	9.680	120	143
-274K	270	12.720	100	129
-334K	330	15.240	90	118

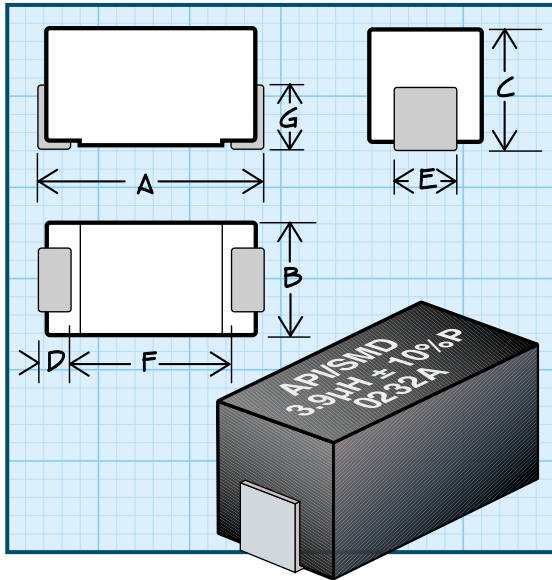
Optional Tolerances: J=5% H=3% G=2%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Surface Mount Power Inductors

POWER INDUCTORS



Physical Parameters

	Inches	Millimeters
A	0.300 to 0.325	7.62 to 8.26
B	0.105 to 0.125	2.67 to 3.18
C	0.125 to 0.145	3.18 to 3.68
D	0.020 Min.	0.508 Min
E	0.040 to 0.060	1.02 to 1.52
F	0.190 (Ref. only)	4.83 (Ref. only)
G	0.070 (Ref. only)	1.78 (Ref. only)

Weight Max (Grams) 0.30

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C 0.210 W

Inductance Measured at 1V with no DC current

Incremental Current The current at which the inductance will be decreased by a maximum of 5% from its initial zero DC value.

Packaging Tape & reel (16mm): 7" reel, 500 pieces max.; 13" reel, 2200 pieces max.

Made in the U.S.A. Patent Protected

DASH NUMBER*

INDUCTANCE (µH)
±10% @ 1 KHz

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAX. (mA DC)

INCREMENTAL
CURRENT (mA DC)

SERIES P1330 FERRITE CORE

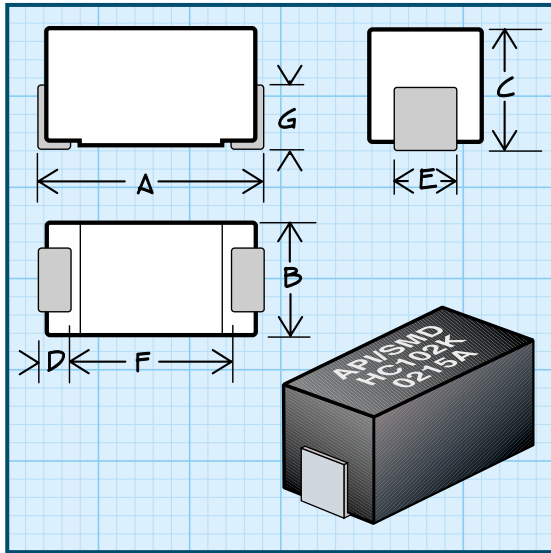
-102K	1.0	0.035	2780	1526
-122K	1.2	0.041	2690	1400
-152K	1.5	0.043	2030	1291
-182K	1.8	0.048	1950	1180
-222K	2.2	0.075	1690	1104
-272K	2.7	0.080	1550	936
-332K	3.3	0.108	1460	840
-392K	3.9	0.118	1390	732
-472K	4.7	0.125	1330	720
-562K	5.6	0.145	1110	612
-682K	6.8	0.165	1080	600
-822K	8.2	0.180	1020	600
-103K	10	0.216	946	564
-123K	12	0.252	912	516
-153K	15	0.288	858	432
-183K	18	0.328	817	420
-223K	22	0.384	694	348
-273K	27	0.425	657	324
-333K	33	0.538	568	270
-393K	39	0.600	488	270
-473K	47	0.792	467	246
-563K	56	0.900	442	216
-683K	68	1.020	384	174
-823K	82	1.380	362	150
-104K	100	1.680	347	132
-124K	120	1.800	327	111
-154K	150	2.040	272	106
-184K	180	2.400	261	89
-224K	220	2.648	223	72
-274K	270	4.320	191	60
-334K	330	4.800	179	57
-394K	390	5.640	171	48
-474K	470	6.000	161	41
-564K	560	6.960	138	35
-684K	680	8.760	130	30
-824K	820	9.960	113	26
-105K	1000	11.160	105	22

Optional Tolerances: J=5% H=3% G=2%

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Surface Mount Power Inductors



Physical Parameters

	Inches	Millimeters
A	0.235 to 0.255	5.97 to 6.48
B	0.085 to 0.105	2.16 to 2.67
C	0.090 to 0.110	2.29 to 2.79
D	0.060 to 0.080	1.52 to 2.03
E	0.035 to 0.055	0.89 to 1.40
F	0.100 (Ref. only)	2.54 (Ref. only)
G	0.058 (Ref. only)	1.47 (Ref. only)

Dimensions "A" and "C" are over terminals

Operating Temperature Range -55°C to +125°C

Maximum Power Dissipation at 60°C 0.56 W

Core Material Ferrite

Note Current rating is based on 60°C ambient and 125°C max. operating temperature. The Incremental Current is the current which causes a maximum change of inductance of 10%.

Packaging Tape & reel (12mm):
7" reel, 750 pieces max.; 13" reel, 2700 pieces max.

Made In the U.S.A. Patent Protected

DASH NUMBER*

INDUCTANCE
(µH) ±10%

TEST FREQUENCY (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAXIMUM (mA)

INCREMENTAL
CURRENT DC (mA)

SERIES 2512 FERRITE CORE

-102K	1.0	7.9	0.15	1640	1230
-122K	1.2	7.9	0.21	1390	1040
-152K	1.5	7.9	0.27	1220	920
-182K	1.8	7.9	0.29	1180	890
-222K	2.2	7.9	0.40	1000	750
-272K	2.7	7.9	0.54	865	649
-332K	3.3	7.9	0.75	734	551
-392K	3.9	7.9	0.82	702	527
-472K	4.7	7.9	1.0	636	477
-562K	5.6	7.9	1.1	606	455
-682K	6.8	7.9	1.2	580	435
-822K	8.2	7.9	1.3	557	418
-103K	10.0	7.9	1.5	519	389
-123K	12.0	2.5	1.6	503	377
-153K	15.0	2.5	1.8	474	355
-183K	18.0	2.5	2.6	394	296
-223K	22.0	2.5	3.5	340	255
-273K	27.0	2.5	3.7	330	248
-333K	33.0	2.5	3.8	326	245
-393K	39.0	2.5	3.9	322	242
-473K	47.0	2.5	4.2	310	233
-563K	56.0	2.5	4.6	296	222
-683K	68.0	2.5	5.1	281	211
-823K	82.0	2.5	5.6	278	209
-104K	100.0	2.5	6.0	260	195

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Series 3483R & S3483R

RoHS
Compliant

Surface Mount Power Inductors

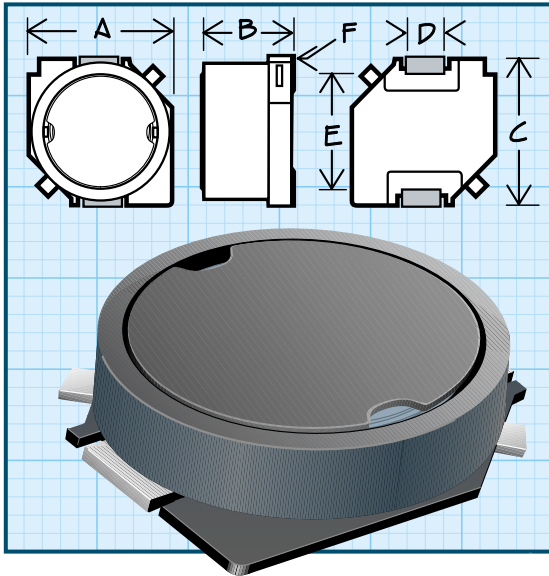
DASH NUMBER*

INDUCTANCE @ 100 KHz
(μH) ±20%

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAXIMUM (Amps)

POWER INDUCTORS



Physical Parameters

	Inches	Millimeters
A	0.276 to 0.299	7.0 to 7.6
B	0.114 to 0.138	2.9 to 3.5
C	0.276 to 0.299	7.0 to 7.6
D	0.067 to 0.091	1.7 to 2.3
E	0.201 to 0.224	5.1 to 5.7
F	0.033 Nom.	0.85 Nom.

F = Electrode Thickness

Current Rating

The DC where inductance value decreases 10% or where the temperature rise is 40°C Max.

Operating Temperature Range -20°C to +80°C

Marking Printed with the last three numbers of the Delevan Part Number (i.e. 101)

Electrical Characteristics (Initial) @ 25°C

- Notes**
- 1) Miniature Surface Mount Type
 - 2) Low Profile
 - 3) Inductance Range is 1-100μH
 - 4) Available in Magnetically Shielded or Unshielded Versions

Packaging Tape and Reel for Auto Insertion (16mm): 13" reel, 1000 pieces max.; 7" reel not available.

SERIES 3483 - UNSHIELDED

-1R0M	1.0	0.022	2.88
-1R5M	1.5	0.026	2.67
-2R2M	2.2	0.032	2.40
-3R3M	3.3	0.041	2.08
-4R7M	4.7	0.049	1.92
-6R8M	6.8	0.067	1.60
-100M	10.0	0.085	1.41
-120M	12.0	0.100	1.28
-150M	15.0	0.130	1.12
-180M	18.0	0.160	1.00
-220M	22.0	0.180	0.93
-270M	27.0	0.240	0.80
-330M	33.0	0.290	0.72
-390M	39.0	0.340	0.66
-470M	47.0	0.410	0.59
-560M	56.0	0.480	0.55
-680M	68.0	0.600	0.49
-820M	82.0	0.710	0.44
-101M	100.0	0.950	0.38

SERIES S3483 - SHIELDED WITH FERRITE

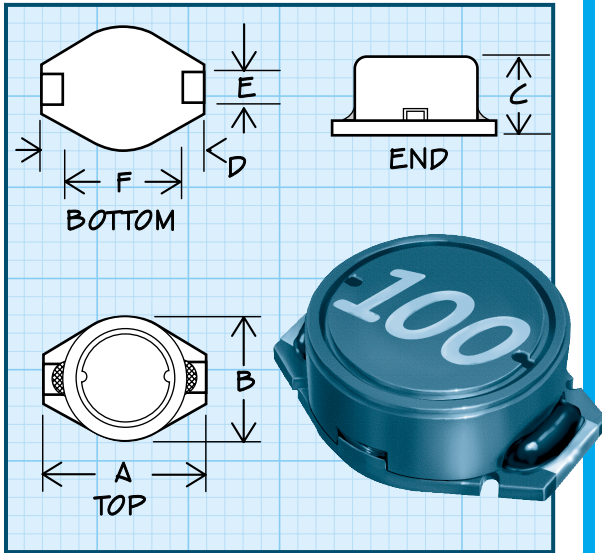
-1R0M	1.0	0.019	3.12
-1R5M	1.5	0.023	2.85
-2R2M	2.2	0.028	2.66
-3R3M	3.3	0.035	2.26
-4R7M	4.7	0.043	1.96
-6R8M	6.8	0.055	1.76
-100M	10.0	0.080	1.34
-120M	12.0	0.090	1.23
-150M	15.0	0.120	1.09
-180M	18.0	0.130	0.99
-220M	22.0	0.150	0.90
-270M	27.0	0.210	0.81
-330M	33.0	0.250	0.72
-390M	39.0	0.310	0.67
-470M	47.0	0.350	0.60
-560M	56.0	0.430	0.55
-680M	68.0	0.520	0.50
-820M	82.0	0.600	0.46
-101M	100.0	0.790	0.41

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Series SDS130

Surface Mount Shielded Power Choke



Physical Parameters:

	Inches	Millimeters
A	0.500 ±0.008	12.7 ±0.2
B	0.398 ±0.008	10.1 ±0.2
C	0.118 Max.	3.0 Max.
D	0.094 ±0.008	2.4 ±0.2
E	0.087 ±0.008	2.2 ±0.2
F	0.303 ±0.015	7.7 ±0.4
G	0.287 Ref.	7.3 Ref.
H	0.118 Ref.	3.0 Ref.
I	0.110 Ref.	2.8 Ref.

Current rating at 25°C Ambient:

40°C Max. Rise

Operating Temperature Range:

-40°C to +85°C

Core Material:

Ferrite

Weight Maximum:

0.85 grams

Packaging:

Tape & Reel (24mm): 13" reel
1000 pieces max.

DASH NUMBER*

INDUCTANCE (µH)

TOLERANCE

TEST FREQUENCY (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

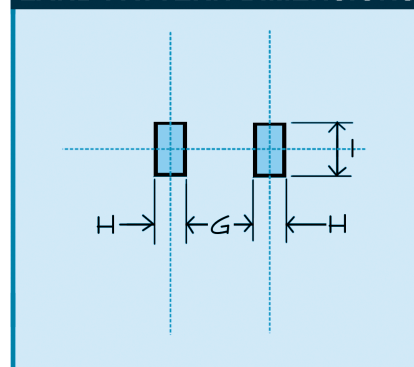
CURRENT RATING
MAXIMUM (MA)

SERIES SDS130					
-222N	2.2	±30%	100	0.045	3500
-302N	3.0	±30%	100	0.062	3000
-392N	3.9	±30%	100	0.070	2800
-472N	4.7	±30%	100	0.078	2500
-682N	6.8	±30%	100	0.100	2200
-103M	10	±20%	1	0.145	2000
-123M	12	±20%	1	0.185	1750
-153M	15	±20%	1	0.20	1500
-183M	18	±20%	1	0.27	1400
-223M	22	±20%	1	0.30	1300
-273M	27	±20%	1	0.40	1200
-333M	33	±20%	1	0.45	1100
-393M	39	±20%	1	0.56	950
-473M	47	±20%	1	0.65	800
-563M	56	±20%	1	0.68	750
-683M	68	±20%	1	0.80	700
-823M	82	±20%	1	1.20	650
-104M	100	±20%	1	1.40	600
-124M	120	±20%	1	1.52	550
-154M	150	±20%	1	1.80	500
-184M	180	±20%	1	2.20	450
-224M	220	±20%	1	2.70	400
-274M	270	±20%	1	3.10	350
-334M	330	±20%	1	3.60	300
-394M	390	±20%	1	4.60	250
-474M	470	±20%	1	5.10	200

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

LAND PATTERN DIMENSIONS

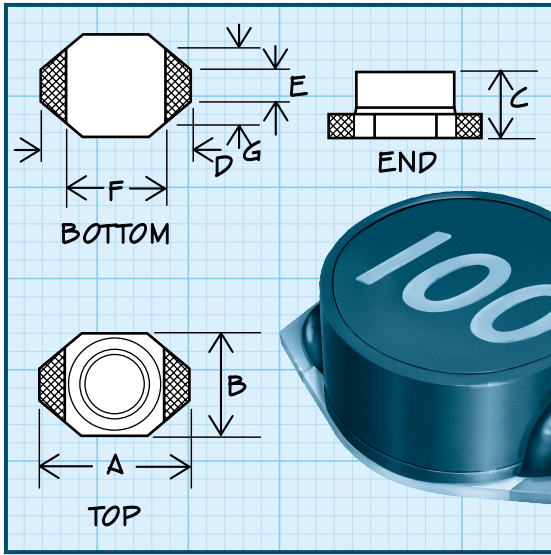


POWER INDUCTORS

Series SDS680

Surface Mount Shielded Power Choke

POWER INDUCTORS



Physical Parameters:

	Inches	Millimeters
A	0.260 Max	6.60 Max.
B	0.175 Max	4.45 Max.
C	0.115 Max.	2.92 Max.
D	0.040 ±0.010	1.02 ±0.25
E	0.050 Max.	1.27 Max.
F	0.170 ±0.015	4.32 ±0.38
G	0.120 Ref.	3.05 Ref.
H	0.055 Ref.	1.40 Ref.
I	0.140 Ref.	3.56 Ref.
J	0.160 Ref.	4.06 Ref.

Current rating at 25°C Ambient:

40°C Max. Rise

Operating Temperature Range:

-40°C to +85°C

Core Material:

Ferrite

Weight Maximum:

0.20 grams

Packaging:

Tape & Reel (16mm): 13" reel
2000 pieces max.

DASH NUMBER*

INDUCTANCE (µH)

TOLERANCE

SRF (MHz) REF. ONLY

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAXIMUM (MA)

SERIES SDS680

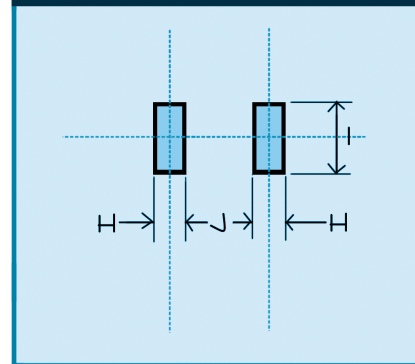
-102M	1.0	±20%	250	0.040	3000
-152M	1.5	±20%	125	0.045	2800
-222M	2.2	±20%	120	0.050	1800
-332M	3.3	±20%	120	0.055	1600
-472M	4.7	±20%	105	0.060	1400
-682M	6.8	±20%	50	0.065	1200
-103M	10	±20%	38	0.075	1000
-153M	15	±20%	33	0.090	800
-223M	22	±20%	25	0.110	700
-333M	33	±20%	20	0.190	600
-473M	47	±20%	20	0.230	500
-683M	68	±20%	15	0.290	400
-104M	100	±20%	10	0.480	300
-154M	150	±20%	9	0.590	260
-224M	220	±20%	6	0.770	220
-334M	330	±20%	5	1.40	200
-474M	470	±20%	4	1.80	190
-684M	680	±20%	3	2.20	180
-105M	1000	±20%	2	3.40	150
-155M	1500	±20%	2	4.20	120
-225M	2200	±20%	2	8.50	100
-335M	3300	±20%	1	11.0	80
-475M	4700	±20%	1	13.9	60
-685M	6800	±20%	1	25.0	40
-106M	10000	±20%	0.8	32.8	20

Inductance tested at 100KHz

*Complete part # must include series # PLUS the dash #

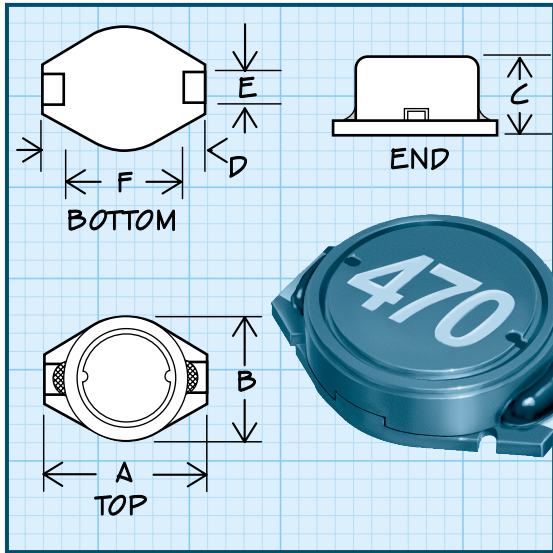
For further surface finish information,
refer to TECHNICAL section of this catalog.

LAND PATTERN DIMENSIONS



Series SDS850

Surface Mount Shielded Power Choke



Physical Parameters:

	Inches	Millimeters
A	0.413 ±0.008	10.5 ±0.2
B	0.315 ±0.008	8.0 ±0.2
C	0.190 Max.	4.8 Max.
D	0.083 ±0.008	2.1 ±0.2
E	0.079 ±0.008	2.0 ±0.2
F	0.236 ±0.012	6.0 ±0.3
G	0.224 Ref.	5.7 Ref.
H	0.094 Ref.	2.4 Ref.
I	0.087 Ref.	2.2 Ref.

Current rating at 25°C Ambient:

40°C Max. Rise

Operating Temperature Range:

-40°C to +85°C

Core Material:

Ferrite

Weight Maximum:

0.95 grams

Packaging:

Tape & Reel (16mm): 13" reel
1000 pieces max.

DASH NUMBER*

INDUCTANCE (µH)

TOLERANCE

TEST FREQUENCY (KHz)

DC RESISTANCE
MAXIMUM (OHMS)

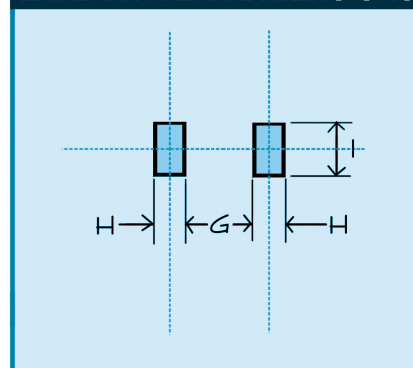
CURRENT RATING
MAXIMUM (MA)

SERIES SDS850					
-222N	2.2	±30%	100	0.040	2500
-392N	3.9	±30%	100	0.055	2100
-562N	5.6	±30%	100	0.065	1950
-822N	8.2	±30%	100	0.080	1750
-103M	10	±20%	1	0.100	1500
-123M	12	±20%	1	0.120	1400
-153M	15	±20%	1	0.140	1300
-183M	18	±20%	1	0.160	1200
-223M	22	±20%	1	0.180	1100
-273M	27	±20%	1	0.200	1000
-333M	33	±20%	1	0.240	920
-393M	39	±20%	1	0.260	840
-473M	47	±20%	1	0.280	750
-563M	56	±20%	1	0.380	680
-683M	68	±20%	1	0.440	600
-823M	82	±20%	1	0.550	540
-104M	100	±20%	1	0.600	500
-124M	120	±20%	1	0.750	450
-154M	150	±20%	1	0.900	400
-184M	180	±20%	1	1.050	350
-224M	220	±20%	1	1.180	300
-274M	270	±20%	1	1.40	270
-334M	330	±20%	1	1.80	240
-394M	390	±20%	1	2.10	220
-474M	470	±20%	1	2.25	200
-564M	560	±20%	1	3.00	180
-684M	680	±20%	1	3.40	170
-824M	820	±20%	1	4.00	160
-105M	1000	±20%	1	5.00	150

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

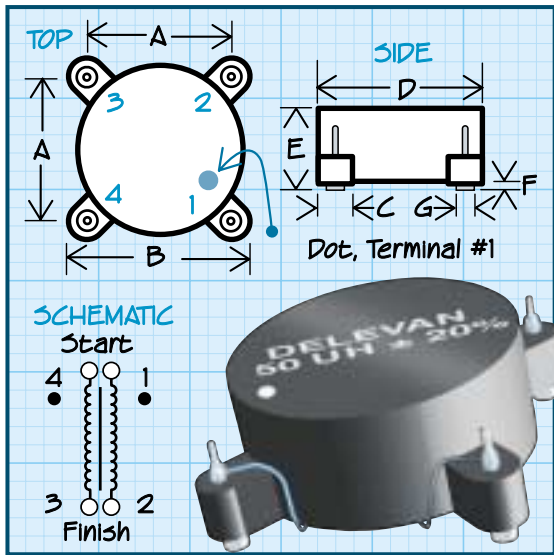
LAND PATTERN DIMENSIONS



POWER INDUCTORS

Surface Mount
Low-Profile Power Toroids

POWER INDUCTORS



Mechanical Configuration A flat top surface mount case with excellent coplanarity of terminals.

Physical Parameters

	Inches	Millimeters
A	0.285 ± 0.010	7.24 ± 0.25
B	0.360 ± 0.010	9.14 ± 0.25
C	0.060 ± 0.010	1.52 ± 0.25
D	0.350 ± 0.010	8.90 ± 0.25
E	0.200 ± 0.010	5.08 ± 0.25
F	0.025 ± 0.010	0.64 ± 0.25
G	0.040 (Ref.)	1.02 (Ref.)

Electrical Configuration Two inductors per unit; internal terminals: #1(start) – #2(finish) & #4(start) – #3 (finish).

Series Externally connect #2 to #4.

Parallel Externally connect #1 to #4 and #2 to #3.

Operating Temperature Range –55°C to +125°C

Electrical Characteristics Measured at +25°C

Rated DC Current Based upon 20°C temperature rise from 25°C ambient and zero Amp DC

Maximum Power Dissipation at 25°C 0.230 Watts

Inductance Tolerance Tolerance is specified by suffixing an alpha character to the part number as follows: K = 10%, L = 15%. M = 20%. Units are normally supplied to the tolerance indicated in the tables.

Marking Parts are printed with Delevan, Inductance Value, tolerance, and dot at terminal #1.

DASH NUMBER*

0 AMPS DC INDUCTANCE
±20% (µH @ 10kHz)

DCR (Ohms) Max.

RATED DC CURRENT
(Amps) Max

INDUCTANCE (µH) Min. @
Rated DC Current

SERIES 4501 FERROUS ALLOY CORE

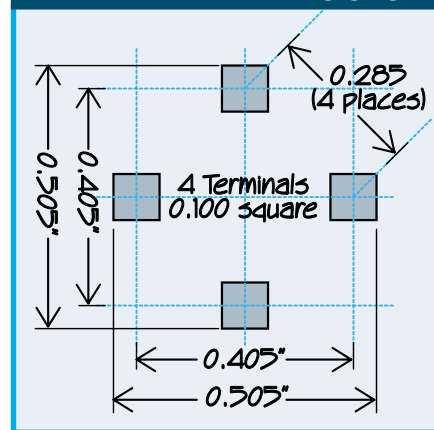
Parallel Connected Specifications

-102M	0.47	0.005	6.50	0.30
-104M	0.68	0.006	5.50	0.40
-106M	1.00	0.008	5.00	0.60
-108M	2.00	0.010	4.50	1.20
-110M	5.00	0.020	3.00	3.00
-112M	8.00	0.025	2.70	4.80
-114M	10.0	0.030	2.50	6.00
-116M	15.0	0.060	1.70	9.50
-118M	20.0	0.080	1.50	12.0
-120M	25.0	0.090	1.40	15.0
-122M	33.0	0.105	1.40	20.0
-124M	50.0	0.200	0.95	30.0
-126M	68.0	0.300	0.80	40.0
-128M	100.0	0.400	0.65	60.0
-130M	150.0	0.550	0.60	90.0
-132M	200.0	0.750	0.45	120.0
-134M	300.0	1.100	0.40	180.0

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

LAND PATTERN DIMENSIONS



Series Connected Specifications

Inductance Four (4) times parallel inductance specifications.

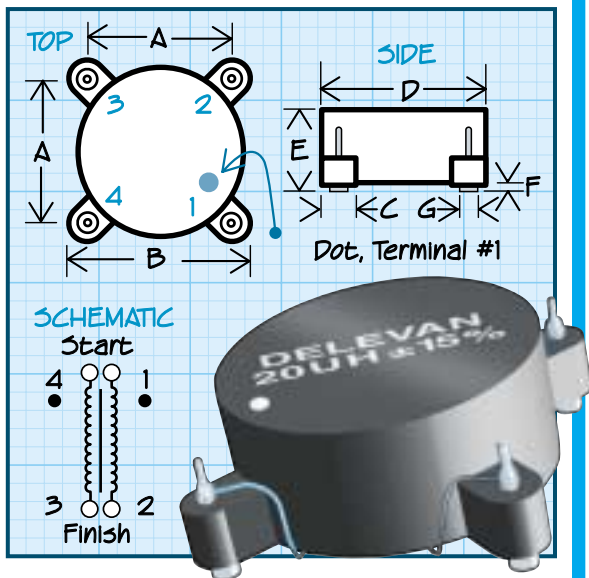
DCR Four (4) times parallel DCR specifications.

Rated DC Current minimum One-half of parallel Rated DC Current specifications.

Packaging Tape & reel (24mm):

13" reel, 600 pieces max.; 7" reel not available

Surface Mount
High Current Power Toroids



Test Methods Solderability per MIL-STD-202, Method 208. Inductance tested at 10 KHZ and zero Amp DC. DC Resistance tested at 25°C

Mechanical Configuration A flat top surface mount case with excellent coplanarity of terminals.

Physical Parameters

	Inches	Millimeters
A	0.390 to 0.410	9.91 to 10.41
B	0.520 to 0.540	13.21 to 13.71
C	0.115 to 0.135	2.92 to 3.43
D	0.480 to 0.500	12.19 to 12.70
E	0.310 max.	7.87 max.
F	0.020 to 0.040	0.51 to 1.02
G	0.060 (Ref. only)	1.52 (Ref. only)

Electrical Configuration Two inductors per unit; internal terminals: #1(start) – #2(finish) & #4(start) – #3 (finish).

Series Externally connect #2 to #4.

Parallel Externally connect #1 to # 4 and # 2 to # 3.

Operating Temperature Range –55°C to +125°C

Rated DC Current Based upon 20°C temperature rise from 25°C ambient and zero Amp DC

Maximum Power Dissipation at 25°C 0.313 Watts

Inductance Tolerance Tolerance is specified by suffixing an alpha character to the part number as follows: K = 10%, L = 15%. M = 20%. Units are normally supplied to the tolerance indicated in the tables.

Marking Parts are printed with Delevan, Inductance Value and Tolerance, and Dot at Terminal # 1.

DASH NUMBER*

SERIES 4448 POWDERED IRON CORE

-02M	0.47	± 20%	7.90	0.005	2.00	± 20%	3.95	0.020
-04M	0.68	± 20%	7.20	0.006	3.00	± 20%	3.60	0.024
-06M	1.00	± 20%	5.90	0.009	4.00	± 20%	2.95	0.036
-08M	2.00	± 20%	4.60	0.014	8.00	± 20%	2.30	0.056
-10M	5.00	± 20%	3.30	0.027	20.0	± 20%	1.65	0.108
-12M	8.00	± 20%	3.00	0.033	32.0	± 20%	1.50	0.132
-14L	10.0	± 15%	2.50	0.047	40.0	± 15%	1.25	0.188
-16L	15.0	± 15%	2.30	0.057	60.0	± 15%	1.15	0.228
-18L	20.0	± 15%	1.90	0.085	80.0	± 15%	0.95	0.340
-20L	25.0	± 15%	1.60	0.116	100	± 15%	0.80	0.464
-22L	33.0	± 15%	1.30	0.166	132	± 15%	0.65	0.664
-24L	50.0	± 15%	1.20	0.202	200	± 15%	0.60	0.808
-26L	68.0	± 15%	1.10	0.238	272	± 15%	0.55	0.952
-28L	100	± 15%	0.72	0.565	400	± 15%	0.36	2.260
-30L	150	± 15%	0.64	0.696	600	± 15%	0.32	2.784
-32L	200	± 15%	0.60	0.810	800	± 15%	0.30	3.240
-34L	300	± 15%	0.54	1.003	1200	± 15%	0.27	4.012

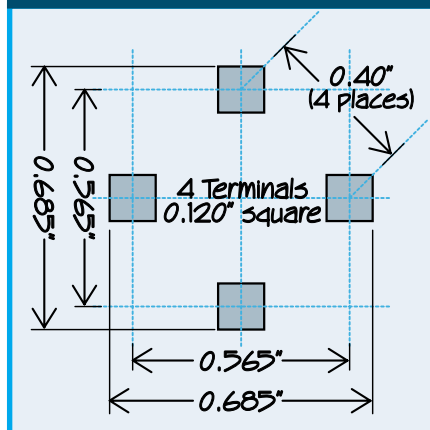
SERIES 4448 FERROUS ALLOY CORE

-102M	0.47	± 20%	7.90	0.004	2.00	± 20%	3.95	0.016
-104M	0.68	± 20%	7.00	0.005	3.00	± 20%	3.50	0.020
-106M	1.00	± 20%	6.50	0.006	4.00	± 20%	3.25	0.024
-108M	2.00	± 20%	5.90	0.007	8.00	± 20%	2.95	0.028
-110M	5.00	± 20%	4.40	0.014	20.0	± 20%	2.20	0.056
-112M	8.00	± 20%	3.50	0.019	32.0	± 20%	1.75	0.076
-114L	10.0	± 15%	3.40	0.020	40.0	± 15%	1.70	0.080
-116L	15.0	± 15%	3.00	0.024	60.0	± 15%	1.50	0.096
-118L	20.0	± 15%	2.10	0.055	80.0	± 15%	1.05	0.220
-120L	25.0	± 15%	2.00	0.064	100	± 15%	1.00	0.254
-122L	33.0	± 15%	1.80	0.072	132	± 15%	0.90	0.288
-124L	50.0	± 15%	1.50	0.111	200	± 15%	0.75	0.444
-126L	68.0	± 15%	1.20	0.158	272	± 15%	0.60	0.632
-128L	100	± 15%	0.92	0.303	400	± 15%	0.46	1.212
-130L	150	± 15%	0.82	0.372	600	± 15%	0.41	1.488
-132L	200	± 15%	0.64	0.545	800	± 15%	0.32	2.180
-134L	300	± 15%	0.62	0.672	1200	± 15%	0.31	2.688

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

LAND PATTERN DIMENSIONS



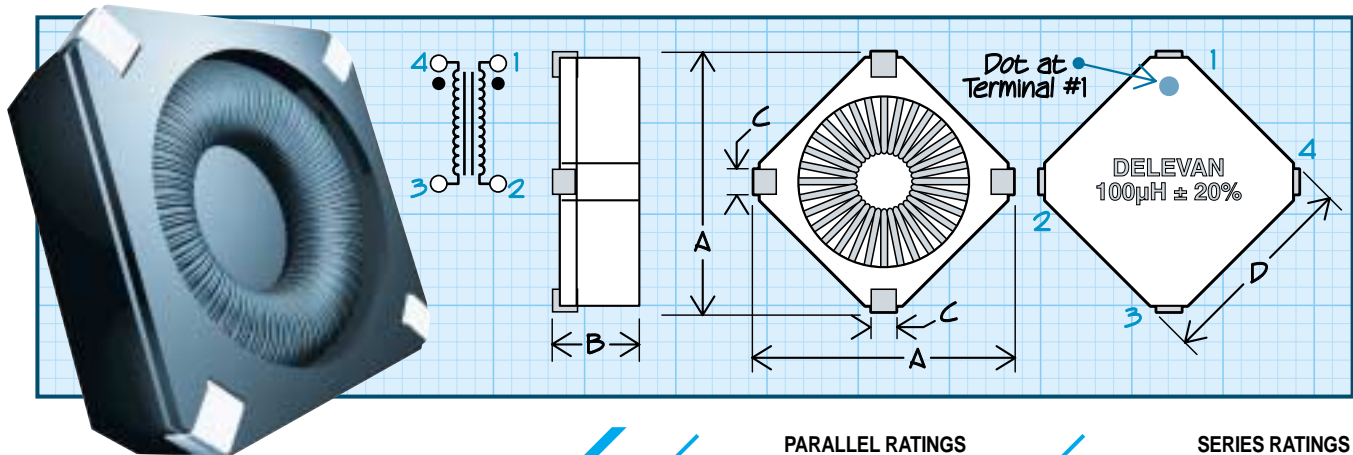
Inductance at Rated DC Current Minimum percent of measured zero Amp DC Inductance.

-02M to -34L = 60%; -102M to 134L = 50%

Packaging Tape & reel (24mm):

13" reel, 350 pieces max.; 7" reel not available

Surface Mount Toroids



POWER INDUCTORS

• **Application Versatility**

Coupled inductors;
 1:1 isolation transformers

• **UL94VO Header Material**

• **Low EMI Radiation**

Lead Pad Coplanarity Max.

0.002 inches; 0.05 mm

Inductance values

from 0.49 µH to 300 µH

Physical Parameters

	Inches	Millimeters
A	0.594 ± 0.015	15.09 ± 0.38
B	0.250 Max.	6.35 Max.
C	0.070 ± 0.020	1.78 ± 0.51
D	0.450 ± 0.020	11.43 ± 0.51
E	0.520	13.21
F	0.520	13.21
G	0.120 Sq.	3.05 Sq.

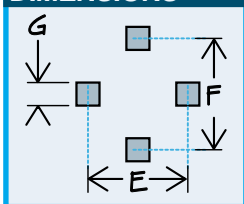
Weight Max. (Grams) 2.0

Soldering Internal solder connections
 use high temperature solder

*Complete part # must include series
 # PLUS the dash #

For further surface finish
 information, refer to TECHNICAL
 section of this catalog.

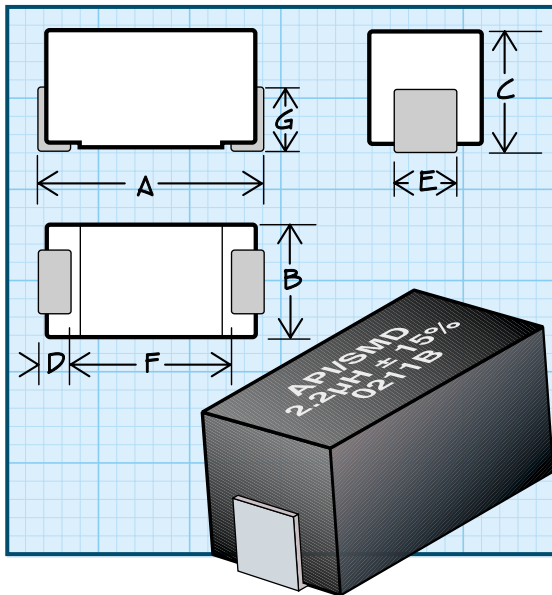
**LAND PATTERN
 DIMENSIONS**



DASH NUMBER*	PARALLEL RATINGS				SERIES RATINGS			
	OPEN CIRCUIT INDUCTANCE (µH) @ 1KHz ± 20%	FULL LOAD CURRENT ADC**	FULL LOAD INDUCTANCE (µH) REF. @ 1 KHz	DC RESISTANCE NOMINAL (Ohms)	OPEN CIRCUIT INDUCTANCE (µH) @ 1KHz ± 20%	FULL LOAD CURRENT ADC**	FULL LOAD INDUCTANCE (µH) REF. @ 1 KHz	DC RESISTANCE NOMINAL (Ohms)
SERIES CMT4545 FERROUS ALLOY								
-00M	0.49	8.7	0.37	0.004	2.00	4.4	1.48	0.016
-02M	0.87	7.8	0.63	0.005	3.50	3.9	2.52	0.020
-04M	1.50	7.1	0.89	0.006	5.40	3.6	3.56	0.024
-06M	2.00	6.6	1.21	0.007	7.80	3.3	4.84	0.028
-08M	5.60	4.7	3.08	0.014	22.0	2.3	12.3	0.056
-10M	8.20	4.4	4.05	0.016	31.2	2.2	16.2	0.064
-12M	10	3.9	5.41	0.020	42.4	2.0	21.6	0.080
-14M	15	3.6	7.03	0.024	62.5	1.8	28.1	0.096
-16M	22	2.6	11.2	0.045	86.5	1.3	45.0	0.180
-18M	27	2.5	13.1	0.049	105	1.2	52.3	0.196
-20M	33	2.3	15.9	0.056	135	1.2	63.5	0.224
-22M	50	1.9	24.4	0.086	208	0.94	97.7	0.344
-24M	68	1.7	31.5	0.101	280	0.87	126	0.404
-26M	75	1.6	34.8	0.125	300	0.78	139	0.500
-28M	100	1.4	46.1	0.152	420	0.71	184	0.608
-30M	150	1.0	79.0	0.300	610	0.51	316	1.200
-32M	200	0.94	96.6	0.343	805	0.47	386	1.372
-34M	250	0.79	130	0.486	1000	0.40	520	1.944
-36M	300	0.75	146	0.536	1200	0.38	584	2.144
SERIES CMT4545 HIGH SATURATION CORE								
-100M	0.49	8.7	0.45	0.004	2.00	4.4	1.80	0.016
-102M	0.87	7.8	0.77	0.005	3.50	3.9	3.08	0.020
-104M	1.50	7.1	1.16	0.006	5.40	3.6	4.64	0.024
-106M	2.00	6.6	1.62	0.007	7.80	3.3	6.48	0.028
-108M	5.60	4.7	4.38	0.014	22.0	2.3	17.5	0.056
-110M	8.20	4.4	6.08	0.016	31.2	2.2	24.3	0.064
-112M	10	3.9	7.63	0.020	42.4	2.0	30.5	0.080
-114M	15	3.6	10.8	0.024	62.5	1.8	43.1	0.096
-116M	22	2.6	15.6	0.045	86.5	1.3	62.2	0.180
-118M	27	2.5	18.8	0.049	105	1.2	75.4	0.196
-120M	33	2.3	24.0	0.056	135	1.2	96.0	0.224
-122M	50	1.9	36.9	0.086	208	0.94	148	0.344
-124M	68	1.7	49.0	0.101	280	0.87	196	0.404
-126M	75	1.6	52.6	0.125	300	0.78	210	0.500
-128M	100	1.4	72.2	0.152	420	0.71	289	0.608
-130M	150	1.0	108	0.300	610	0.51	431	1.200
-132M	200	0.94	143	0.343	805	0.47	571	1.372
-134M	250	0.79	182	0.486	1000	0.40	730	1.944
-136M	300	0.75	216	0.536	1200	0.38	864	2.144

** Note The full load current is the current rating that will cause a maximum temperature rise of 35°C from a 90°C ambient

**High Current
Surface Mount Power Inductors**



Mechanical Configuration Units are encapsulated in a Surface Mount package, using an epoxy molded case. Leads are pre-tinned. A high resistivity ferrite core allows for high inductance with low DC resistance.

Physical Parameters

	Inches	Millimeters
A	0.490 to 0.520	12.44 to 13.21
B	0.230 to 0.250	5.84 to 6.35
C	0.210 to 0.230	5.33 to 5.84
D	0.050 Min.	1.27 Min.
E	0.055 to .075	1.40 to 1.91
F	0.330 (Ref. only)	8.38 (Ref. only)
G	0.120 (Ref. only)	3.04 (Ref. only)

Operating Temperature Range -55°C to +125°C

Current Rating at 85°C Ambient 40°C Rise

Maximum Power Dissipation at 85°C 0.55 Watts

Inductance

Measured at 1 VAC open circuit with no DC current.

Incremental Current The current at which the inductance will be decreased by a maximum of 5% from its initial zero DC value.

Weight (Grams Max.) 1.5

Packaging Tape & reel (24mm): 13" reel, 800 pieces max.; 7" reel not available

Made In the U.S.A. Patent Protected

DASH NUMBER*	INDUCTANCE @ 1 KHz (µH) ± 15%	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (Amps)	INCREMENTAL CURRENT (Amps)
SERIES 4922 FERRITE CORE				
-221L	0.22	0.0080	7.00	7.00
-271L	0.27	0.0085	6.75	6.75
-331L	0.33	0.0090	6.50	6.50
-391L	0.39	0.0095	6.25	6.25
-471L	0.47	0.0100	6.00	6.00
-561L	0.56	0.0105	5.80	5.80
-681L	0.68	0.0110	5.70	5.70
-821L	0.82	0.0120	5.60	5.60
-01L	1.00	0.013	5.50	5.50
-02L	1.20	0.018	4.69	4.69
-03L	1.50	0.020	4.45	4.45
-04L	1.80	0.021	4.34	4.34
-05L	2.20	0.029	3.70	3.70
-06L	2.70	0.034	3.41	3.41
-07L	3.30	0.038	3.23	3.23
-08L	3.90	0.042	3.07	3.07
-09L	4.70	0.047	2.90	2.90
-10L	5.60	0.051	2.79	2.79
-11L	6.80	0.058	2.61	2.61
-12L	8.20	0.063	2.51	2.51
-13L	10.0	0.071	2.36	2.36
-14L	12.0	0.079	2.24	2.24
-15L	15.0	0.089	2.11	2.11
-16L	18.0	0.119	1.82	1.82
-17L	22.0	0.152	1.61	1.61
-18L	27.0	0.179	1.48	1.48
-19L	33.0	0.222	1.33	1.33
-20L	39.0	0.315	1.12	1.12
-21L	47.0	0.362	1.04	1.04
-22L	56.0	0.397	1.00	1.00
-23L	68.0	0.418	0.97	0.97
-24L	82.0	0.604	0.81	0.81
-25L	100	0.672	0.76	0.76
-26L	120	0.735	0.73	0.73
-27L	150	0.998	0.63	0.63
-28L	180	1.370	0.53	0.53
-29L	220	1.580	0.50	0.50
-30L	270	1.770	0.47	0.47
-31L	330	2.510	0.39	0.39
-32L	390	2.730	0.38	0.38
-33L	470	3.250	0.35	0.35
-34L	560	3.750	0.33	0.33
-35L	680	4.310	0.30	0.30
-36L	820	6.040	0.26	0.26
-37L	1000	6.900	0.24	0.24
-38L	1200	10.00	0.200	0.200
-39L	1500	12.50	0.178	0.178
-40L	1800	16.00	0.157	0.157
-41L	2200	20.00	0.141	0.141
-42L	2700	23.00	0.131	0.131
-43L	3300	25.00	0.126	0.126
-44L	3900	33.00	0.110	0.110
-45L	4700	37.00	0.103	0.103
-46L	5600	40.00	0.100	0.100
-47L	6800	62.00	0.080	0.080
-48L	8200	66.00	0.077	0.077
-49L	10000	74.00	0.071	0.071
-50L	12000	93.00	0.065	0.065
-51L	15000	105.0	0.061	0.061
-52L	18000	143.0	0.052	0.052
-53L	22000	160.0	0.050	0.050

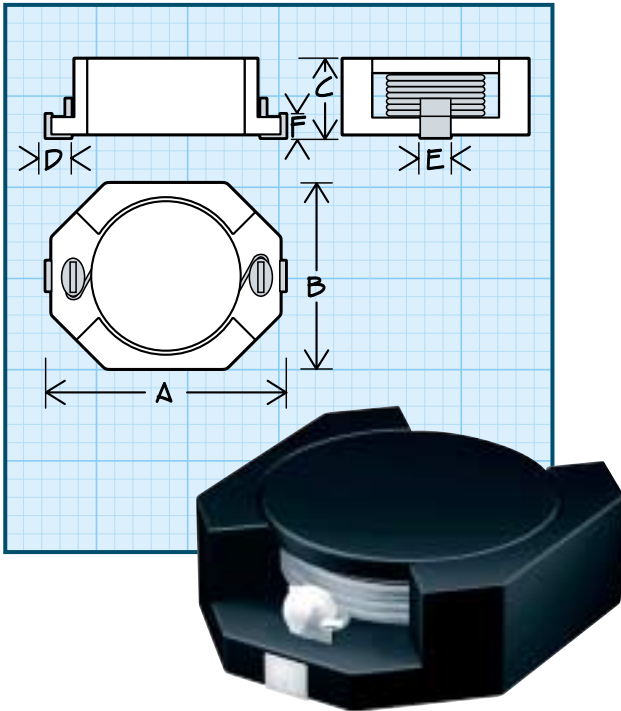
**OPTIONAL TOLERANCES: VALUES < 10µH: K=10% J=5%
VALUES ≥ 10µH: K=10% J=5% H=3%**

***Complete part # must include series # PLUS the dash #**

**For further surface finish information,
refer to TECHNICAL section of this catalog.**

High Current
Surface Mount Power Inductors

POWER INDUCTORS

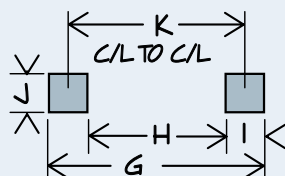


Mechanical Configuration A high saturation ferrite bobbin core allows for excellent size to Direct Current handling ratio. The base is a molded thermoset epoxy material with side wall extensions that provide protection to the ferrite core.

Physical Parameters

	Inches	Millimeters
A	0.530 ± 0.015	13.46 ± 0.38
B	0.420 ± 0.010	10.67 ± 0.25
C	0.175 ± 0.010	4.45 ± 0.25
D	0.060 ± 0.010	1.52 ± 0.25
E	0.070 ± 0.010	1.78 ± 0.25
F	0.035 Min.	0.889 Min.
G	0.560	14.22
H	0.360	9.14
I	0.100	2.54
J	0.100	2.54
K	0.460	11.68

LAND PATTERN DIMENSIONS



DASH NUMBER*
INDUCTANCE @ 100KHZ
(µH) ± 10%
DC RESISTANCE
MAXIMUM (OHMS)
INCREMENTAL
CURRENT (mA)
CURRENT RATING
MAXIMUM (mA)
SRF TYPICAL (MHZ)

SERIES 5142 FERRITE CORE					
-103K	10	0.070	3400	2000	30
-123K	12	0.075	3200	1930	28
-153K	15	0.095	2800	1710	23
-183K	18	0.110	2500	1595	21
-223K	22	0.130	2240	1465	19
-273K	27	0.150	2040	1365	18
-333K	33	0.170	1880	1280	16
-393K	39	0.180	1680	1245	14
-473K	47	0.190	1500	1210	13
-563K	56	0.200	1400	1180	12
-683K	68	0.280	1260	1000	11
-823K	82	0.330	1160	920	10
-104K	100	0.360	1040	880	9.0
-124K	120	0.430	960	800	8.0
-154K	150	0.500	860	740	7.3
-184K	180	0.660	780	650	6.5
-224K	220	0.800	720	590	5.9
-274K	270	0.870	640	565	5.2
-334K	330	1.15	580	490	4.6
-394K	390	1.40	540	445	4.0
-474K	470	1.55	480	425	3.6
-564K	560	1.90	440	380	3.3
-684K	680	2.20	400	355	2.9
-824K	820	2.90	360	310	2.6
-105K	1000	3.60	330	275	2.3
-125K	1200	4.40	300	250	2.1
-155K	1500	6.00	270	215	1.9
-185K	1800	6.50	250	205	1.7
-225K	2200	7.80	230	190	1.5
-275K	2700	8.70	200	175	1.3
-335K	3300	11.7	180	155	1.2
-395K	3900	15.5	170	130	1.1
-475K	4700	17.5	150	125	1.0
-565K	5600	20.0	140	115	0.9
-685K	6800	26.0	130	100	0.8
-825K	8200	30.0	110	95	0.7
-106K	10000	38.0	100	85	0.6

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Operating Temperature Range -55°C to +125°C

Current Rating at 85°C Ambient 40°C rise

Maximum Power Dissipation at 85°C 0.388 Watts

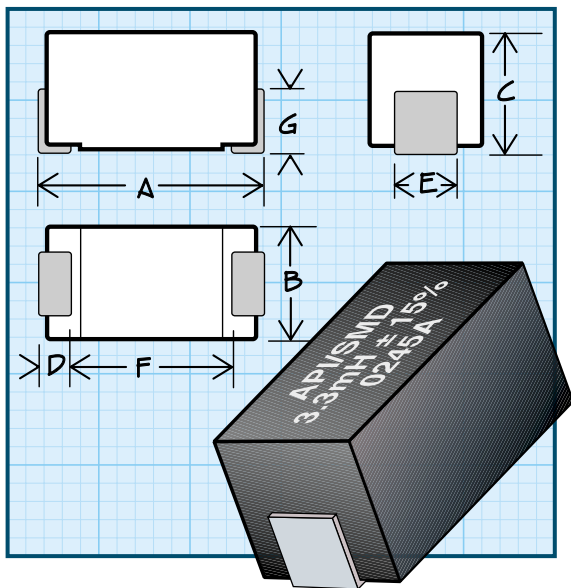
Incremental Current The current at which the inductance will be decreased by a maximum of 10% from the initial zero DC value.

DWV Rating 200Vrms between terminals and top & sides

Weight 1.4 grams max.

Packaging Tape & Reel (24mm): 13" reel, 500 pieces max.; 7" reel not available

High Current
Surface Mount Power Inductors



Mechanical Configuration

Units are encapsulated in a Surface Mount package, using an epoxy molded case. High resistivity ferrite core, allows for high inductance with low DC resistance.

Physical Parameters

	Inches	Millimeters
A	0.840 to 0.880	21.34 to 22.35
B	0.310 to 0.330	7.87 to 8.38
C	0.266 to 0.286	6.76 to 7.26
D	0.050 Min.	1.27 Min.
E	0.070 to 0.110	1.78 to 2.79
F	0.750 (Ref. only)	19.05 (Ref. only)
G	0.120 (Ref. only)	3.05 (Ref. only)

Dimensions "A" and "C" are over terminals.

Operating Temperature Range -55°C to +125°C

Current Rating 40°C Rise over 85°C Ambient

Maximum Power Dissipation at 85°C 0.50 Watts

Inductance

Measured at 1 VAC open circuit with no DC current.

Incremental Current The current at which the inductance will decrease by a maximum of 5% from its initial zero DC value.

Weight Max. (Grams) 2.5

Packaging Tape & reel (44mm):

13" reel, 480 pieces max.; 7" reel not available

Made In the U.S.A. Patent Protected

DASH NUMBER*
INDUCTANCE @ 1 KHz
(µH) ± 15%
DC RESISTANCE
MAXIMUM (OHMS)
CURRENT RATING
MAXIMUM (Amps)
INCREMENTAL
CURRENT (Amps)

SERIES 8532 FERRITE CORE				
-01L	1.0	0.009	6.27	6.4
-02L	1.2	0.010	5.95	5.8
-03L	1.5	0.011	5.67	5.2
-04L	1.8	0.012	5.43	4.8
-05L	2.2	0.013	5.22	4.3
-06L	2.7	0.014	5.03	3.9
-07L	3.3	0.016	4.70	3.5
-08L	3.9	0.017	4.56	3.2
-09L	4.7	0.022	4.01	2.9
-10L	5.6	0.024	3.84	2.7
-11L	6.8	0.026	3.69	2.5
-12L	8.2	0.028	3.55	2.2
-13L	10.0	0.033	3.27	2.0
-14L	12.0	0.037	3.09	1.8
-15L	15.0	0.040	2.97	1.6
-16L	18.0	0.044	2.84	1.5
-17L	22.0	0.050	2.66	1.4
-18L	27.0	0.070	2.25	1.2
-19L	33.0	0.075	2.17	1.1
-20L	39.0	0.084	2.05	1.0
-21L	47.0	0.104	1.84	0.93
-22L	56.0	0.130	1.65	0.85
-23L	68.0	0.145	1.56	0.77
-24L	82.0	0.152	1.53	0.71
-25L	100.0	0.208	1.30	0.64
-26L	120.0	0.283	1.12	0.58
-27L	150.0	0.330	1.04	0.52
-28L	180.0	0.362	0.99	0.48
-29L	220.0	0.505	0.84	0.43
-30L	270.0	0.557	0.80	0.39
-31L	330.0	0.650	0.74	0.35
-32L	390.0	0.770	0.68	0.32
-33L	470.0	1.03	0.59	0.29
-34L	560.0	1.14	0.56	0.27
-35L	680.0	1.50	0.49	0.25
-36L	820.0	1.98	0.42	0.22
-37L	1000.0	2.30	0.39	0.20
-38L	1200.0	2.55	0.37	0.18
-39L	1500.0	3.00	0.34	0.16
-40L	1800.0	4.00	0.30	0.15
-41L	2200.0	4.40	0.28	0.14
-42L	2700.0	5.80	0.25	0.12
-43L	3300.0	6.56	0.23	0.11
-44L	3900.0	8.63	0.20	0.10
-45L	4700.0	10.1	0.19	0.09
-46L	5600.0	11.2	0.18	0.09
-47L	6800.0	15.0	0.15	0.08
-48L	8200.0	20.8	0.13	0.07
-49L	10000.0	23.4	0.12	0.06
-50L	12000.0	26.0	0.12	0.06
-51L	15000.0	36.0	0.10	0.05
-52L	18000.0	40.0	0.09	0.05

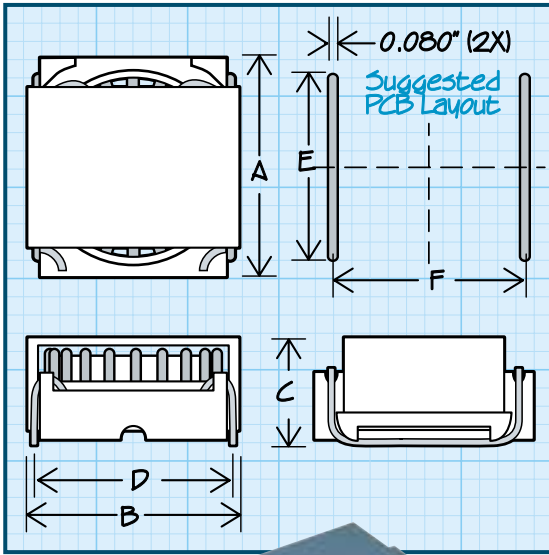
OPTIONAL TOLERANCES:
VALUES < 10µH: K=10% J=5%
VALUES ≥ 10µH: K=10% J=5% H=3%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

High Current Toroidal Inductors

POWER INDUCTORS



Physical Parameters:

Package	A Max.	B Max.	C Max.	D	E	F
HCT-37X	0.615	0.600	0.370	0.500	0.440	0.500
HCT-44X	0.665	0.665	0.400	0.560	0.490	0.560
HCT-50X	0.740	0.740	0.400	0.630	0.560	0.630
HCT-68X	0.945	0.940	0.400	0.820	0.700	0.820

Above dimensions in inches and unless otherwise stated all tolerances are ± 0.010

Mechanical Configuration

Units are surface mount, low profile, self-leaded devices

Frequency Range 1KHz up to 1 MHz

Operating Temperature Range -30°C to $+130^{\circ}\text{C}$

Leads Solder tinned

Marking Printed with API and Part Number

Materials Meet UL94V-0

Optional Tolerances As low as 10% available on some values. Consult factory for details.

Maximum Power Dissipation at 25°C Ambient

- HCT-37x, 0.9 W
- HCT-44x, 1.0 W
- HCT-50x, 1.1 W
- HCT-68x, 1.2 W

Packaging Bulk only, except HCT-37x

ELECTRICAL SPECIFICATIONS @ 25°C

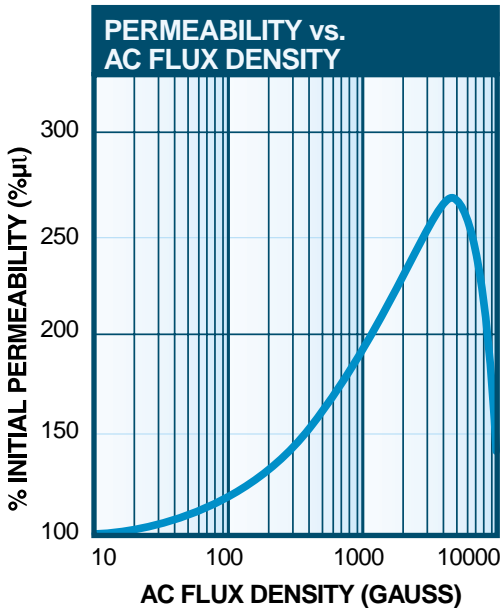
DC AMPS TO PRODUCE A MAXIMUM TEMPERATURE RISE FROM 25°C AMBIENT

DASH NUMBER*	INDUCTANCE (μH) $\pm 25\%$	Q TYPICAL	L & Q TEST FREQUENCY (KHz)	SRF (MHz, TYPICAL)	DC RESISTANCE MAXIMUM (m)	DC RESISTANCE TYPICAL (m)	DC AMPS TO PRODUCE A MAXIMUM TEMPERATURE RISE FROM 25°C AMBIENT					
							5°C	15°C	25°C	35°C	45°C	55°C
-371	1.25	32	100	260	2.5	2.2	5.73	9.75	12.30	14.30	16.00	17.40
-372	2.1	27	100	160	4.0	3.4	4.58	7.78	9.87	11.40	12.80	13.90
-373	2.8	27	100	110	6.3	5.4	3.62	6.17	7.82	9.10	10.10	11.00
-374	4.2	24	100	100	7.9	6.8	3.23	5.49	6.97	8.10	9.04	9.83
-441	2.8	33	100	110	3.6	3.2	5.13	8.73	11.00	12.80	14.30	15.60
-442	4.2	29	100	85	5.4	4.7	4.23	7.20	9.14	10.60	11.80	12.80
-443	5.7	29	100	65	7.5	6.4	3.60	6.13	7.78	9.05	10.00	10.90
-444	9.0	26	100	55	11.4	9.8	2.91	4.95	6.28	7.31	8.15	8.87
-501	6.5	25	100	55	6.6	5.8	3.97	6.75	8.56	9.96	11.10	12.00
-502	8.4	23	100	45	8.3	7.2	3.55	6.04	7.66	8.91	9.94	10.80
-503	12.5	23	100	35	11.4	9.8	3.04	5.17	6.56	7.63	8.50	9.25
-504	17.0	22	100	29	17.0	14.6	2.49	4.23	5.37	6.25	6.97	7.58
-681	10.5	35	100	30	6.2	5.3	4.35	7.40	9.39	10.90	12.10	13.20
-682	17.6	35	100	24	12.3	10.7	3.06	5.21	6.60	7.68	8.57	9.32
-683	22.0	30	100	21	17.5	15.0	2.58	4.40	5.58	6.49	7.24	7.87
-684	29.0	30	100	16	25.0	21.5	2.16	3.67	4.66	5.42	6.04	6.57

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

High Current Toroidal Inductors



For frequencies 10 KHz
 (mW/cm³) Hz Gauss
 Core loss = 1.47×10^{-8} f 0.971 B^{2.11}

For frequencies 10 KHz
 (mW/cm³) Hz Gauss
 Core loss = 9.07×10^{-10} f 1.26 B^{2.11}

Bpk = $\frac{E_{rms} 10^8}{4.44 A n f}$

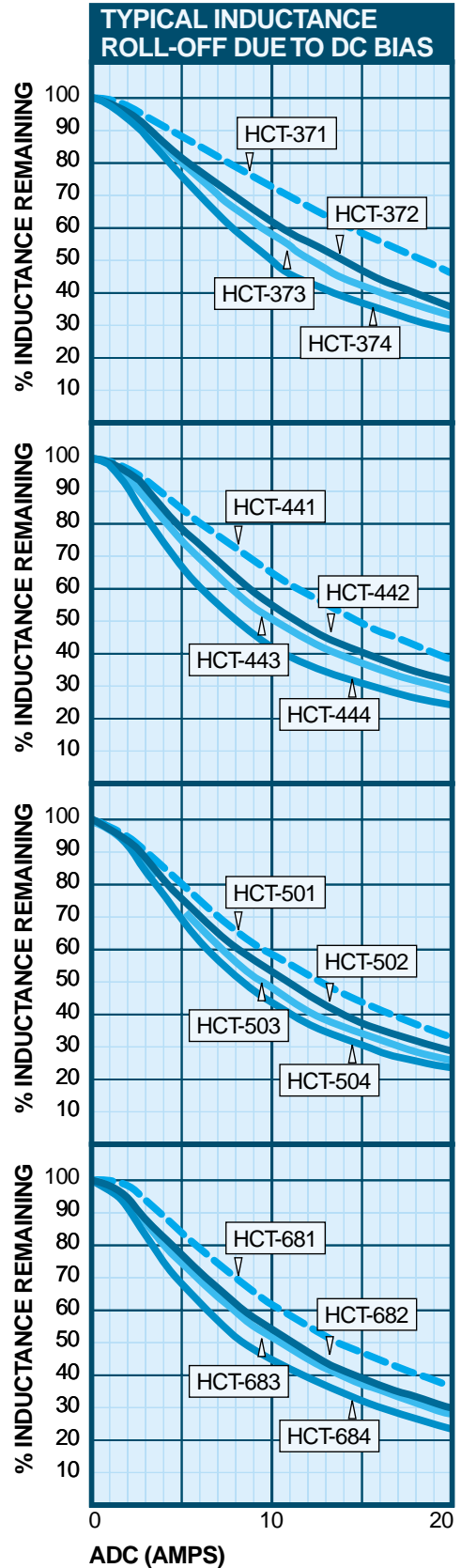
A:
 T37 = 0.064 cm²; T44 = 0.099 cm²;
 T50 = 0.112 cm²; T68 = 0.179 cm²

This information is intended to be used in assisting the designer in part selection. Each application may contain other variables which must be considered in part selection, such as temperature effects, waveform distortion, etc. API Delevan Sales/Engineering is available to provide information as needed to fit each application.

Data is representative of a DC current with less than 1% ripple and an AC waveform less than: 50 gauss on the HCT-37X, 25 gauss on the HCT-44X, 15 gauss on the HCT-50X and 10 gauss on the HCT-68X. The effect of AC or ripple flux can be significant in many DC inductor applications. When significantly greater AC flux density is present, it becomes necessary to consider its effect on both core loss and permeability (inductance).

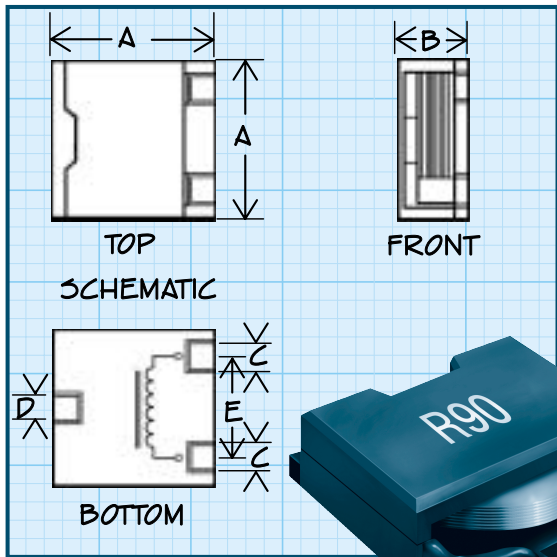
All data points, on the above graphs, that exceed the rated DC current specified for a 55°C rise from a 25°C ambient are for design reference only and are not intended to imply continuous use at those DC current levels.

For more detailed graphs, contact factory



POWER INDUCTORS

Surface Mount
High Current Power Choke



POWER INDUCTORS

Physical Parameters

	Inches	Millimeters
A	0.500 ± 0.016	12.7 ± 0.4
B	0.209 ± 0.012	5.3 ± 0.3
C	0.079 ± 0.008	2.0 ± 0.2
D	0.094 ± 0.008	2.4 ± 0.2
E	0.276 ± 0.012	7.0 ± 0.3
F	0.118 Ref	3.0 Ref
G	0.276 Ref	7.0 Ref
H	0.157 Ref	4.0 Ref

Mechanical Configuration

Flat wire allows for high current ratings in a compact surface mount package. Three terminal position pattern provides secure mounting. Wire is wound on UL94V-0 rated coil former that anchors lead wire exit for excellent coplanarity and lead position.

Test condition Inductance tested at 100KHz

Ambient Temperature Range -25°C to +80°C

Temperature Rise from +25°C Ambient
40°C max with max current rating

Rating Current 25% max decrease in initial inductance

Packaging Tape & reel 24mm width
600 pieces max on 13" reel; 7" reel not available

DASH NUMBER*

INDUCTANCE
±15% (µH)

DCR (m) Max.

RATED CURRENT
(Amps DC)

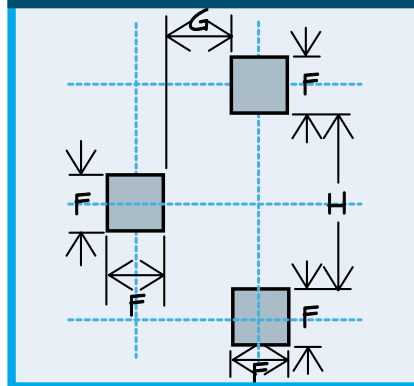
SERIES FW 1405

-401	0.40	1.80	24
-901	0.90	2.80	20
-162	1.60	3.90	15
-252	2.50	4.80	12
-392	3.90	5.80	10

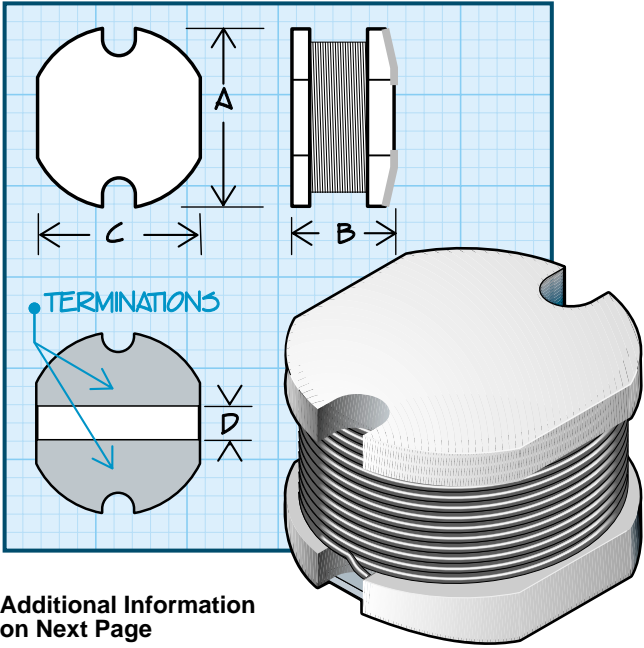
*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

RECOMMENDED LAND PATTERN



SMT Power Choke Core



Additional Information on Next Page

**** Test Measurement Frequency**
 Values < 10µH tested @ 7.96 MHz;
 Values 10uH tested @ 1.0 KHz

Mechanical Configuration
 Units designed for Surface Mounting

Terminals Solder Coated

Core Construction High Resistivity Ferrite

Operating Temperature Range -55°C to +125°C

Current Rating at 25°C Ambient The maximum DC Current that will cause a 40°C maximum temperature rise and where the inductance will not decrease by more than 10% from the zero DC value.

Inductance Tolerance Tolerance is indicated by the suffix to API part number. Standard tolerance per part number is as shown in table. M = ±20%; K = ±10%.

POWER INDUCTORS

Physical Parameters

Dimensions

Inches	PD43	PD54	PD73	PD75	PD104	PD105
A	0.165 ±0.024	0.224 ±0.008	0.303 ±0.008	0.303 ±0.008	0.386 ±0.016	0.386 ±0.016
B	0.137 MAX.	0.177 MAX.	0.138 MAX.	0.197 MAX.	0.157 MAX.	0.213 MAX.
C	0.153 ±0.012	0.201 ±0.008	0.272 ±0.008	0.272 ±0.008	0.346 ±0.016	0.346 ±0.016
D	0.060 REF.	0.051 REF.	0.063 REF.	0.063 REF.	0.083 REF.	0.083 REF.

Millimeters	PD43	PD54	PD73	PD75	PD104	PD105
A	4.2 ±0.6	5.7 ±0.2	7.7 ±0.2	7.7 ±0.2	9.8 ±0.4	9.8 ±0.4
B	3.5 MAX.	4.5 MAX.	3.5 MAX.	5.0 MAX.	4.0 MAX.	5.4 MAX.
C	3.9 ±0.3	5.1 ±0.2	6.9 ±0.2	6.9 ±0.2	8.8 ±0.4	8.8 ±0.4
D	1.52 REF.	1.30 REF.	1.60 REF.	1.60 REF.	2.10 REF.	2.10 REF.

Packaging Tape & reel: 7" reel not available; maximum pieces per 13" reel as follows

	PD43	PD54	PD73	PD75	PD104	PD105
mm	12	16	16	16	24	24
Pieces	1500	1000	1000	500	1000	500

SERIES PD43

DASH NUMBER*	INDUCTANCE (μH) **	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAX. (AMPS)
-102M	1.0	0.049	2.56
-152M	1.5	0.056	2.52
-182M	1.8	0.064	1.95
-222M	2.2	0.071	1.75
-272M	2.7	0.079	1.58
-332M	3.3	0.086	1.44
-392M	3.9	0.094	1.33
-472M	4.7	0.109	1.15
-562M	5.6	0.126	0.99
-682M	6.8	0.131	0.95
-822M	8.2	0.146	0.84
-103M	10	0.182	0.83
-123M	12	0.210	0.80
-153M	15	0.235	0.77
-183M	18	0.338	0.74
-223M	22	0.378	0.66
-273M	27	0.522	0.62
-333K	33	0.540	0.56
-393K	39	0.587	0.52
-473K	47	0.844	0.44
-563K	56	0.937	0.42
-683K	68	1.120	0.37

SERIES PD54

-102M	1.0	0.050	2.90
-152M	1.5	0.055	2.70
-182M	1.8	0.060	2.60
-222M	2.2	0.064	2.40
-272M	2.7	0.067	2.20
-332M	3.3	0.070	2.00
-392M	3.9	0.075	1.90
-472M	4.7	0.080	1.80
-562M	5.6	0.085	1.70
-682M	6.8	0.090	1.60
-822M	8.2	0.095	1.50
-103K	10	0.100	1.44
-123K	12	0.130	1.35
-153K	15	0.160	1.27
-183K	18	0.180	1.19
-223K	22	0.210	1.11
-273K	27	0.240	1.00
-333K	33	0.280	0.90
-393K	39	0.320	0.80
-473K	47	0.370	0.72
-563K	56	0.420	0.68
-683K	68	0.500	0.63
-823K	82	0.600	0.58
-104K	100	0.700	0.52
-124K	120	0.850	0.46
-154K	150	1.100	0.40
-184K	180	1.330	0.37
-224K	220	1.570	0.35

** Test Measurement Frequency:
Values < 10μH tested @ 7.96 MHz
Values 10μH tested @ 1.0 KHz

SERIES PD73

-332M	3.3	0.050	2.50
-392M	3.9	0.055	2.30
-472M	4.7	0.060	2.10
-562M	5.6	0.065	1.90
-682M	6.8	0.070	1.75
-822M	8.2	0.075	1.60
-103K	10	0.080	1.44
-123K	12	0.090	1.35
-153K	15	0.100	1.30
-183K	18	0.115	1.20
-223K	22	0.130	1.07
-273K	27	0.170	0.98
-333K	33	0.205	0.90
-393K	39	0.230	0.80
-473K	47	0.250	0.68
-563K	56	0.280	0.64
-683K	68	0.350	0.59
-823K	82	0.410	0.54
-104K	100	0.480	0.51
-124K	120	0.570	0.45
-154K	150	0.750	0.40
-184K	180	1.000	0.35
-224K	220	1.200	0.31

SERIES PD75

-103K	10	0.080	2.00
-123K	12	0.085	1.90
-153K	15	0.085	1.75
-183K	18	0.090	1.60
-223K	22	0.090	1.50
-273K	27	0.120	1.40
-333K	33	0.150	1.30
-393K	39	0.180	1.20
-473K	47	0.210	1.10
-563K	56	0.240	0.94
-683K	68	0.300	0.85
-823K	82	0.370	0.78
-104K	100	0.500	0.74
-124K	120	0.570	0.68
-154K	150	0.640	0.58
-184K	180	0.680	0.54
-224K	220	0.720	0.49

** Test Measurement Frequency:
Values < 10μH tested @ 7.96 MHz
Values 10μH tested @ 1.0 KHz

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

SERIES PD104

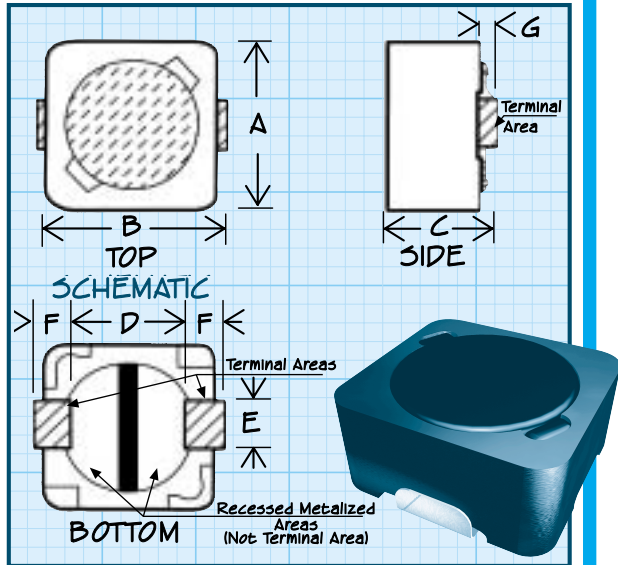
-472M	4.7	0.040	3.00
-562M	5.6	0.045	2.85
-682M	6.8	0.045	2.70
-822M	8.2	0.050	2.55
-103K	10	0.050	2.38
-123K	12	0.060	2.20
-153K	15	0.070	2.00
-183K	18	0.080	1.80
-223K	22	0.090	1.60
-273K	27	0.110	1.45
-333K	33	0.130	1.30
-393K	39	0.150	1.20
-473K	47	0.170	1.10
-563K	56	0.200	1.01
-683K	68	0.220	0.94
-823K	82	0.250	0.85
-104K	100	0.340	0.74
-124K	120	0.450	0.67
-154K	150	0.540	0.61
-184K	180	0.630	0.57
-224K	220	0.720	0.53
-274K	270	0.900	0.48
-334K	330	1.100	0.42
-394K	390	1.300	0.39
-474K	470	1.530	0.35
-564K	560	1.900	0.32
-684K	680	2.300	0.28

SERIES PD105

-103K	10	0.060	2.60
-123K	12	0.070	2.45
-153K	15	0.080	2.30
-183K	18	0.090	2.15
-223K	22	0.100	1.95
-273K	27	0.115	1.80
-333K	33	0.125	1.65
-393K	39	0.145	1.40
-473K	47	0.170	1.28
-563K	56	0.190	1.17
-683K	68	0.230	1.08
-823K	82	0.250	1.00
-104K	100	0.350	0.97
-124K	120	0.420	0.88
-154K	150	0.470	0.80
-184K	180	0.560	0.72
-224K	220	0.730	0.66
-274K	270	0.950	0.60
-334K	330	1.150	0.52
-394K	390	1.350	0.48
-474K	470	1.480	0.42
-564K	560	1.900	0.33
-684K	680	2.250	0.28
-824K	820	2.550	0.24

** Test Measurement Frequency:
Values < 10μH tested @ 7.96 MHz
Values 10μH tested @ 1.0 KHz

Shielded Surface Mount Inductors



Physical Parameters

	Inches	Millimeters
A	0.244 ± 0.012	6.2 ± 0.3
B	0.260 ± .012	6.6 ± 0.3
C	0.118 max.	3.0 max.
D	0.181 Ref. only	4.60 Ref. only
E	0.059 ± 0.007	1.5 ± 0.2
F	0.050 ± 0.007	1.27 ± 0.2
G	0.015 Ref. only	0.38 Ref. only

Mechanical Configuration Units designed for surface mounting; ferrite core and ferrite sleeve

Terminals are Solderable More than 95% new solder coverage when subjected to soldering temperature

Operating temperature range -55°C to +125°C

Application Frequency Range
Values 1.2µH to 12µH to 1.0 MHz Min.
Values above 12µH to 300 KHz Min.

Current Rating at 25°C Ambient The maximum DC current that will cause a 40°C maximum temperature rise and where the inductance will not decrease by more than 10% from its zero DC value

Packaging Tape & reel (16mm):
13" reel, 1500 pieces max.; 7" reel not available

DASH NUMBER*

INDUCTANCE
(µH) ± 20%

TEST
FREQUENCY (KHz)

DC RESISTANCE
MAXIMUM (Ohms)

CURRENT RATING
MAXIMUM (Amps)

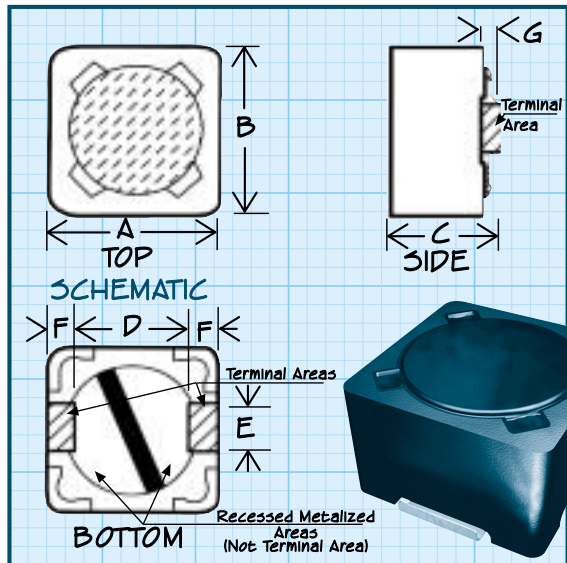
SERIES SPD62				
-122M	1.2	100	0.08	3.50
-242M	2.4	100	0.10	2.80
-352M	3.5	100	0.12	2.50
-472M	4.7	100	0.15	2.00
-682M	6.8	100	0.17	1.80
-103M	10	100	0.18	1.40
-123M	12	100	0.20	1.30
-153M	15	1.0	0.30	1.20
-183M	18	1.0	0.35	1.10
-223M	22	1.0	0.40	1.00
-273M	27	1.0	0.45	0.94
-333M	33	1.0	0.50	0.82
-393M	39	1.0	0.70	0.78
-473M	47	1.0	0.75	0.70
-563M	56	1.0	0.85	0.68
-683M	68	1.0	1.20	0.56
-823M	82	1.0	1.45	0.50
-104M	100	1.0	1.60	0.41
-124M	120	1.0	1.70	0.39
-154M	150	1.0	1.80	0.37
-184M	180	1.0	2.10	0.35
-224M	220	1.0	2.20	0.32
-274M	270	1.0	3.00	0.29
-334M	330	1.0	3.30	0.22

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Shielded Surface Mount Inductors

POWER INDUCTORS



Physical Parameters

	Inches	Millimeters
A	0.287 ± .020	7.3 ± 0.5
B	0.287 ± .020	7.3 ± 0.5
C	0.185 max.	4.7 max. (Series SPD74)
C	0.153 max.	3.9 max. (Series SPD73)
D	0.200 ± 0.020	5.0 ± 0.5
E	0.088 ± 0.020	2.2 ± 0.5
F	0.042 ± 0.020	1.0 ± 0.5
G	0.015 Ref. only	0.38 Ref. only

Mechanical Configuration Units designed for surface mounting; ferrite core and ferrite sleeve

Terminals are Solderable More than 95% new solder coverage when subjected to soldering temperature

Operating temperature range -55°C to +125°C

Application Frequency Range

Values 1.2µH to 10µH to 1.0 MHz Min.

Values above 10µH to 300 KHz Min.

Current Rating at 25°C Ambient The maximum DC current that will cause a 40°C maximum temperature rise and where the inductance will not decrease by more than 10% from its zero DC value

Packaging Tape & reel (16mm):

13" reel, 1000 pieces max.; 7" reel not available

DASH NUMBER*

INDUCTANCE
(µH) ± 20%

TEST
FREQUENCY (KHz)

DC RESISTANCE
MAXIMUM (Ohms)

CURRENT RATING
MAXIMUM (Amps)

SERIES SPD73

-122M	1.2	100	0.02	5.30
-242M	2.4	100	0.032	4.50
-352M	3.5	100	0.035	4.00
-472M	4.7	100	0.050	3.50
-682M	6.8	100	0.065	3.00
-103M	10	100	0.067	2.50
-123M	12	1.0	0.080	2.25
-153M	15	1.0	0.091	2.00
-183M	18	1.0	0.14	1.80
-223M	22	1.0	0.19	1.75
-273M	27	1.0	0.21	1.60
-333M	33	1.0	0.24	1.35
-393M	39	1.0	0.32	1.25
-473M	47	1.0	0.36	1.16
-563M	56	1.0	0.47	1.10
-683M	68	1.0	0.52	1.05
-823M	82	1.0	0.69	0.95
-104M	100	1.0	0.79	0.85
-124M	120	1.0	0.84	0.80
-154M	150	1.0	0.89	0.70
-184M	180	1.0	1.45	0.62
-224M	220	1.0	1.65	0.57
-274M	270	1.0	2.31	0.52
-334M	330	1.0	2.62	0.50
-394M	390	1.0	2.94	0.48
-474M	470	1.0	4.18	0.38
-564M	560	1.0	4.67	0.35
-684M	680	1.0	5.73	0.31
-824M	820	1.0	6.54	0.30
-105M	1000	1.0	9.44	0.26

SERIES SPD74

-122M	1.2	100	0.025	8.0
-242M	2.4	100	0.03	5.50
-352M	3.5	100	0.034	5.0
-472M	4.7	100	0.038	3.70
-682M	6.8	100	0.042	3.50
-103M	10	100	0.049	2.50
-123M	12	1.0	0.038	2.40
-153M	15	1.0	0.081	2.30
-183M	18	1.0	0.091	2.15
-223M	22	1.0	0.11	2.00
-273M	27	1.0	0.15	1.70
-333M	33	1.0	0.17	1.50
-393M	39	1.0	0.23	1.35
-473M	47	1.0	0.26	1.30
-563M	56	1.0	0.35	1.20
-683M	68	1.0	0.38	1.10
-823M	82	1.0	0.43	1.04
-104M	100	1.0	0.61	0.86
-124M	120	1.0	0.66	0.84
-154M	150	1.0	0.88	0.70
-184M	180	1.0	0.98	0.68
-224M	220	1.0	1.17	0.60
-274M	270	1.0	1.64	0.55
-334M	330	1.0	1.86	0.50
-394M	390	1.0	2.85	0.45
-474M	470	1.0	3.01	0.40
-564M	560	1.0	3.62	0.37
-684M	680	1.0	4.63	0.34
-824M	820	1.0	5.2	0.31
-105M	1000	1.0	6.0	0.26

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Shielded Surface Mount Inductors

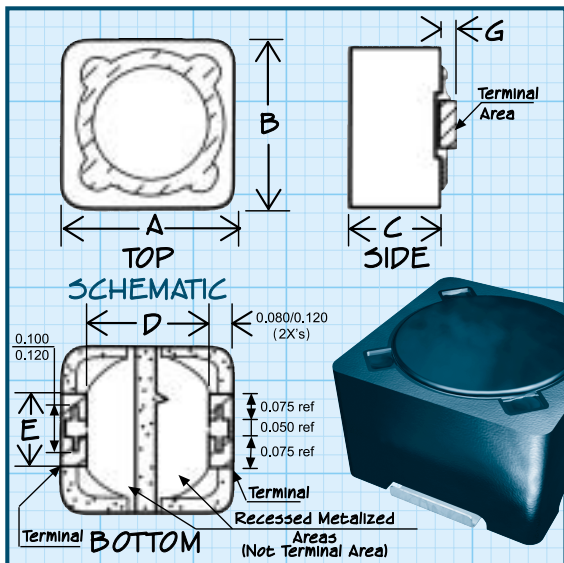
DASH NUMBER*

INDUCTANCE
(μ H) \pm 20%

TEST
FREQUENCY (KHz)

DC RESISTANCE
MAXIMUM (Ohms)

CURRENT RATING
MAXIMUM (Amps)



SERIES SPD125				
-222M	2.2	100	0.020	7.00
-332M	3.3	100	0.030	5.50
-472M	4.7	100	0.040	5.00
-682M	6.8	100	0.050	4.50
-103M	10	100	0.055	4.00
-123M	12	1.0	0.060	3.50
-153M	15	1.0	0.065	3.30
-183M	18	1.0	0.070	3.00
-223M	22	1.0	0.075	2.80
-273M	27	1.0	0.085	2.30
-333M	33	1.0	0.095	2.10
-393M	39	1.0	0.105	2.00
-473M	47	1.0	0.115	1.80
-563M	56	1.0	0.135	1.60
-683M	68	1.0	0.170	1.50
-823M	82	1.0	0.190	1.40
-104M	100	1.0	0.210	1.30
-124M	120	1.0	0.250	1.10
-154M	150	1.0	0.300	1.00
-184M	180	1.0	0.350	0.90
-224M	220	1.0	0.420	0.80
-274M	270	1.0	0.510	0.75
-334M	330	1.0	0.600	0.70
-394M	390	1.0	0.750	0.65
-474M	470	1.0	0.820	0.60
-564M	560	1.0	1.000	0.55
-684M	680	1.0	1.300	0.50
-824M	820	1.0	1.650	0.45
-105M	1000	1.0	2.000	0.40

SERIES SPD127				
-222M	2.2	100	0.015	8.50
-332M	3.3	100	0.018	7.50
-472M	4.7	100	0.022	6.80
-682M	6.8	100	0.030	6.20
-103M	10	100	0.040	5.40
-123M	12	1.0	0.045	4.90
-153M	15	1.0	0.048	4.50
-183M	18	1.0	0.052	3.90
-223M	22	1.0	0.055	3.60
-273M	27	1.0	0.060	3.40
-333M	33	1.0	0.065	3.00
-393M	39	1.0	0.080	2.80
-473M	47	1.0	0.100	2.50
-563M	56	1.0	0.120	2.30
-683M	68	1.0	0.140	2.10
-823M	82	1.0	0.170	1.90
-104M	100	1.0	0.220	1.70
-124M	120	1.0	0.250	1.60
-154M	150	1.0	0.320	1.40
-184M	180	1.0	0.360	1.30
-224M	220	1.0	0.390	1.20
-274M	270	1.0	0.520	1.10
-334M	330	1.0	0.620	1.00
-394M	390	1.0	0.750	0.90
-474M	470	1.0	0.980	0.80
-564M	560	1.0	1.150	0.75
-684M	680	1.0	1.220	0.70
-824M	820	1.0	1.400	0.65
-105M	1000	1.0	1.540	0.62

Physical Parameters

	Inches	Millimeters
A	0.472 \pm 0.020	12.0 \pm 0.5
B	0.472 \pm 0.020	12.0 \pm 0.5
C	0.236 Max.	6.0 Max. (Series SPD125)
	0.315 Max.	8.0 Max. (Series SPD127)
D	0.300 \pm 0.020	7.6 \pm 0.5
E	0.198 \pm 0.020	5.0 \pm 0.5
F	0.086 \pm 0.020	2.18 \pm 0.5
G	0.015 Ref. only	0.38 Ref. only
H	0.075 Ref. only	1.91 Ref. only
I	0.198 Ref. only	5.03 Ref. only

Mechanical Configuration Units designed for surface mounting; ferrite core and ferrite sleeve

Terminals are Solderable More than 95% new solder coverage when subjected to soldering temperature

Operating temperature range -55°C to +125°C

Application Frequency Range

Values 2.2 μ H to 10 μ H to 1.0 MHz Min.
Values above 10 μ H to 300 KHz Min.

Current Rating at 25°C Ambient The maximum DC current that will cause a 40°C maximum temperature rise and where the inductance will not decrease by more than 10% from its zero DC value

Packaging Tape & reel (24mm):

13" reel, 500 pieces max.; 7" reel not available

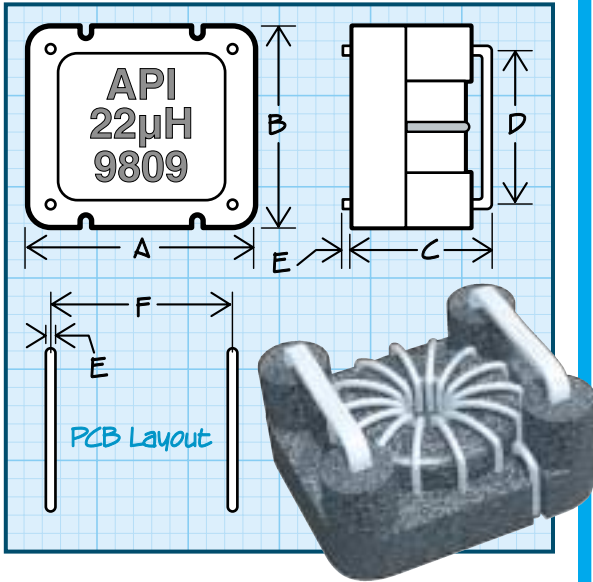
*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

POWER INDUCTORS

Low Loss Surface Mount Power Toroid

POWER INDUCTORS



Physical Parameters

	Inches	Millimeters
A	0.475 ±0.020	12.07 ±0.50
B	0.420 ±0.020	10.67 ±0.50
C	0.290 Max.	7.37 Max.
D	0.400 Ref.	7.62 Ref.
E	0.075 Ref.	1.91 Max.
F	0.375 ±0.020	9.53 ±0.50

Operating Temperature Range -40°C to +125°C

Power Dissipation 0.285 Max. (Watts)

Weight Max. (Grams) 2.00

Packaging Bulk only

DASH NUMBER*
INDUCTANCE @ 1KHz
(µH) ±15%
INCREMENTAL CURRENT
Add, 10% Inductance Loss
INCREMENTAL CURRENT
Add, 20% Inductance Loss
SRF MINIMUM (MHz)
DCR (Ohms) Max.
CURRENT RATING
Add Max.

SERIES LLST						
-4R7	4.7	4.00	6.10	50.0	0.035	2.600
-10	10	2.80	4.10	45.0	0.050	2.250
-15	15	2.10	3.20	40.0	0.055	2.150
-18	18	1.90	3.00	35.0	0.060	2.050
-22	22	1.70	2.80	25.0	0.070	1.900
-25	25	1.60	2.60	20.0	0.080	1.780
-27	27	1.40	2.30	15.0	0.080	1.780
-33	33	1.30	2.20	12.0	0.080	1.780
-47	47	1.00	1.80	10.0	0.120	1.450
-75	75	0.80	1.40	8.0	0.180	1.190
-100	100	0.80	1.40	7.0	0.250	1.000
-125	125	0.64	1.10	6.0	0.250	1.000
-140	140	0.56	0.98	5.0	0.250	1.000
-150	150	0.56	0.98	4.0	0.260	0.985
-175	175	0.54	0.90	3.5	0.325	0.890
-200	200	0.46	0.80	3.2	0.400	0.795
-220	220	0.46	0.80	3.0	0.400	0.795
-270	270	0.46	0.78	2.5	0.500	0.710
-300	300	0.38	0.68	2.0	0.500	0.710
-350	350	0.36	0.62	1.9	0.625	0.650
-400	400	0.28	0.50	1.8	0.700	0.600
-450	450	0.28	0.50	1.7	0.850	0.550
-500	500	0.26	0.50	1.5	1.000	0.500

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Current Rating Based on a 35° C max. rise from 90°C ambient.

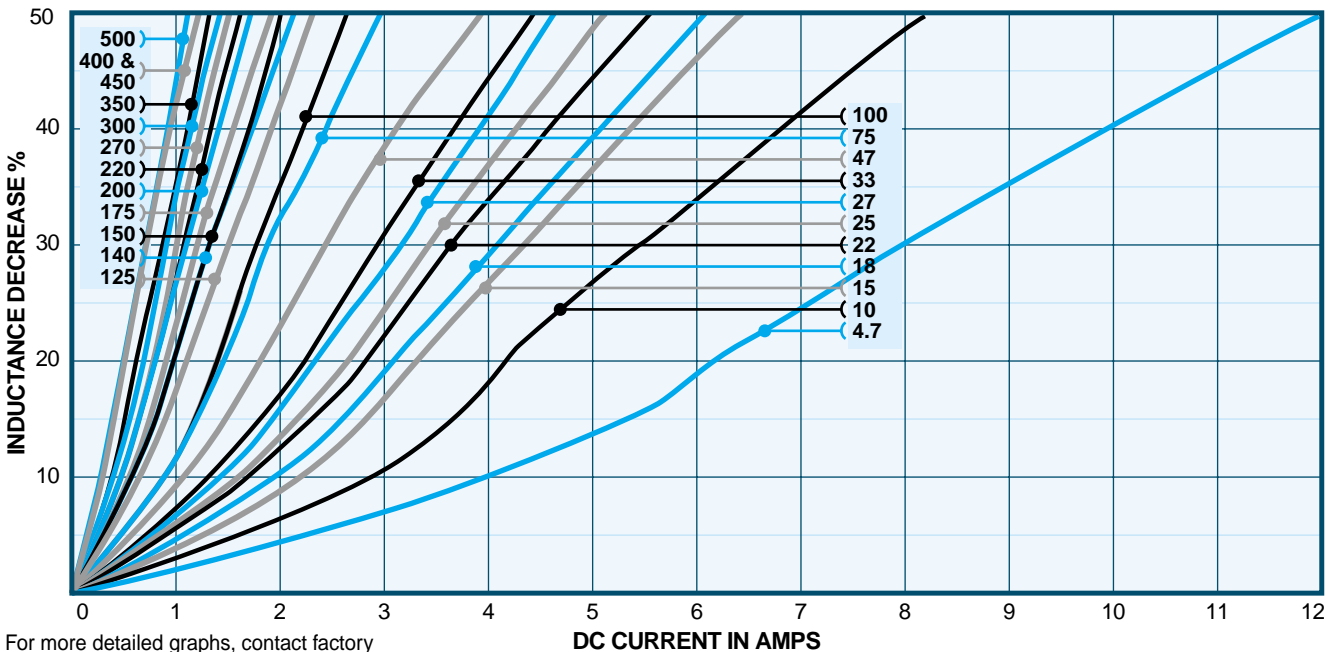
Material High Saturation Nickel/Iron Core.

Inductance Tested at an AC drive level which does not affect the initial permeability of the core, the DC drive level was 0 amps.

Incremental Current The DC current which reduces the inductance value to the percentage drop tabulated.

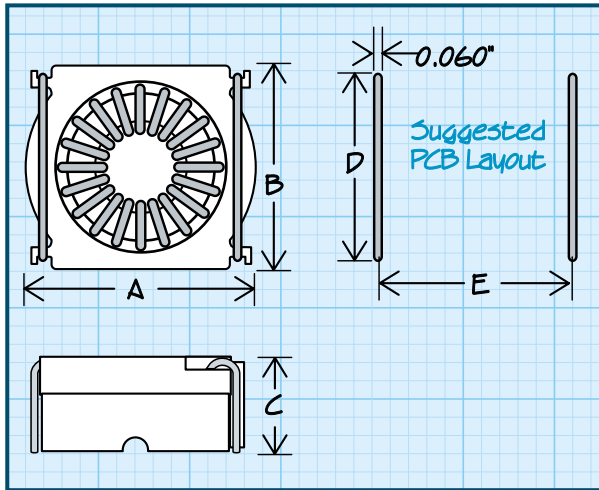
Inductor Base Formed from a high temperature thermoplastic capable of withstanding approx. 600°F for short periods of time.

Marking API, Inductance, and Date Code.



For more detailed graphs, contact factory

Surface Mount Toroidal Power Chokes



PHYSICAL PARAMETERS

PART NUMBER*	A Max.		B Max.		C Max.		D Nom.		E Nom.	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
PT**10-50SM	0.700	17.78	0.670	17.02	0.400	10.16	0.600	15.24	0.600	15.24
PT**25-50SM	0.700	17.78	0.670	17.02	0.400	10.16	0.600	15.24	0.600	15.24
PT**50-50SM	0.700	17.78	0.670	17.02	0.400	10.16	0.600	15.24	0.600	15.24
PT**75-50SM	0.700	17.78	0.670	17.02	0.400	10.16	0.600	15.24	0.600	15.24
PT**100-50SM	0.700	17.78	0.670	17.02	0.400	10.16	0.600	15.24	0.600	15.24
PT**150-50SM	0.700	17.78	0.670	17.02	0.400	10.16	0.600	15.24	0.600	15.24
PT**200-50SM	0.700	17.78	0.670	17.02	0.400	10.16	0.600	15.24	0.600	15.24
PT**250-50SM	0.700	17.78	0.670	17.02	0.400	10.16	0.600	15.24	0.600	15.24
PT**330-50SM	0.700	17.78	0.670	17.02	0.400	10.16	0.600	15.24	0.600	15.24
PT**10-40SM	0.570	14.48	0.560	14.22	0.400	10.16	0.500	12.70	0.500	12.70
PT**25-40SM	0.570	14.48	0.560	14.22	0.400	10.16	0.500	12.70	0.500	12.70
PT**50-40SM	0.570	14.48	0.560	14.22	0.400	10.16	0.500	12.70	0.500	12.70
PT**75-40SM	0.570	14.48	0.560	14.22	0.400	10.16	0.500	12.70	0.500	12.70
PT**100-40SM	0.570	14.48	0.560	14.22	0.400	10.16	0.500	12.70	0.500	12.70
PT**150-40SM	0.570	14.48	0.560	14.22	0.400	10.16	0.500	12.70	0.500	12.70
PT**200-40SM	0.570	14.48	0.560	14.22	0.400	10.16	0.500	12.70	0.500	12.70
PT**250-40SM	0.570	14.48	0.560	14.22	0.400	10.16	0.500	12.70	0.500	12.70
PT**10-30SM	0.440	11.18	0.440	11.18	0.400	10.16	0.400	10.16	0.400	10.16
PT**25-30SM	0.440	11.18	0.440	11.18	0.400	10.16	0.400	10.16	0.400	10.16
PT**50-30SM	0.440	11.18	0.440	11.18	0.400	10.16	0.400	10.16	0.400	10.16
PT**75-30SM	0.440	11.18	0.440	11.18	0.400	10.16	0.400	10.16	0.400	10.16
PT**100-30SM	0.440	11.18	0.440	11.18	0.400	10.16	0.400	10.16	0.400	10.16
PT**150-30SM	0.440	11.18	0.440	11.18	0.400	10.16	0.400	10.16	0.400	10.16
PT**200-30SM	0.440	11.18	0.440	11.18	0.400	10.16	0.400	10.16	0.400	10.16
PT**250-30SM	0.440	11.18	0.440	11.18	0.400	10.16	0.400	10.16	0.400	10.16
PT**10-180SM	0.340	8.636	0.340	8.64	0.300	7.62	0.300	7.62	0.300	7.62
PT**25-180SM	0.340	8.636	0.340	8.64	0.300	7.62	0.300	7.62	0.300	7.62
PT**50-180SM	0.340	8.636	0.340	8.64	0.300	7.62	0.300	7.62	0.300	7.62
PT**75-180SM	0.340	8.636	0.340	8.64	0.300	7.62	0.300	7.62	0.300	7.62
PT**100-180SM	0.340	8.636	0.340	8.64	0.300	7.62	0.300	7.62	0.300	7.62

** Insert HF or KM for complete Part Number

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Series PTHFxxxR-SM & PTKMxxxR-SM PTHF-SM & PTKM-SM

RoHS
Compliant

Traditional
First Quality

Surface Mount Toroidal Power Chokes



- **Excellent electromagnetic shielding** performance for commercial and industrial applications
- **Cost-effective** surface mount design
- **For higher saturation levels** use Series PTHF-SM
- Current rating from 0.92 to 7.36 amps
- Inductance values from 10 μ H to 330 μ H

Notes 1) Rated current is based on a 35°C temperature rise at an ambient temperature of 90°C.
2) Incremental current is the approximate value that will cause a percentage drop in inductance as indicated in the table.

PART NUMBER*

INDUCTANCE (μ H)
@ 1 kHz \pm 10%

CURRENT RATING ADC
Inc-I ADC
 Δ L 10%

Inc-I ADC
 Δ L 20%

DC RESISTANCE
MAXIMUM (Ohms)

SRF MINIMUM (MHz)

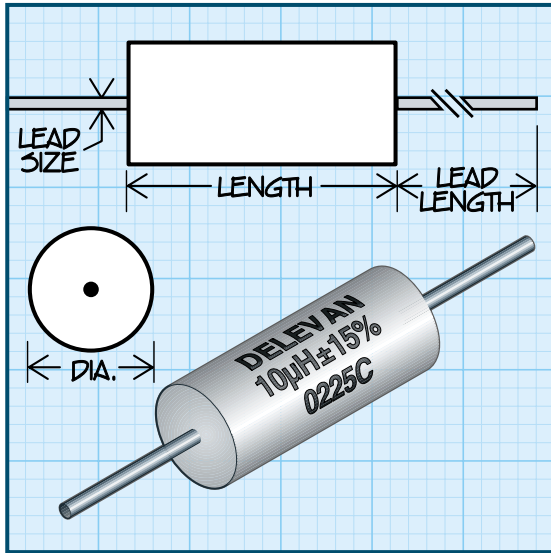
SERIES PTHF-SM HIGH SATURATION CORE						
PTHF10-50SM	10	7.36	6.00	8.70	0.01	35.0
PTHF25-50SM	25	5.20	3.60	5.30	0.02	10.0
PTHF50-50SM	50	3.93	2.00	3.10	0.04	7.0
PTHF75-50SM	75	3.47	1.60	2.50	0.05	5.0
PTHF100-50SM	100	3.14	1.50	2.20	0.06	4.0
PTHF150-50SM	150	2.33	1.20	1.80	0.10	3.0
PTHF200-50SM	200	1.97	1.00	1.60	0.14	2.0
PTHF250-50SM	250	1.84	0.90	1.40	0.16	1.5
PTHF330-50SM	330	1.69	0.80	1.20	0.19	1.0
PTHF10-40SM	10	4.84	3.80	5.70	0.02	35.0
PTHF25-40SM	25	3.38	2.20	3.50	0.04	20.0
PTHF50-40SM	50	1.90	1.70	2.50	0.11	13.0
PTHF75-40SM	75	1.69	1.30	2.00	0.14	9.0
PTHF100-40SM	100	1.60	1.10	1.70	0.16	6.0
PTHF150-40SM	150	1.45	0.90	1.40	0.19	3.5
PTHF200-40SM	200	1.12	0.70	1.10	0.32	3.0
PTHF250-40SM	250	1.05	0.70	1.10	0.36	2.5
PTHF10-30SM	10	2.56	2.20	3.40	0.05	35.0
PTHF25-30SM	25	2.16	1.40	2.10	0.07	25.0
PTHF50-30SM	50	1.81	1.20	1.30	0.10	10.0
PTHF75-30SM	75	1.62	0.80	1.20	0.13	7.0
PTHF100-30SM	100	1.50	0.60	1.00	0.15	6.0
PTHF150-30SM	150	1.33	0.60	1.00	0.19	3.5
PTHF200-30SM	200	1.04	0.50	0.70	0.30	3.0
PTHF250-30SM	250	0.96	0.50	0.70	0.36	3.0
PTHF10-180SM	10	1.60	0.90	1.40	0.10	35.0
PTHF25-180SM	25	1.33	0.60	0.90	0.15	30.0
PTHF50-180SM	50	1.12	0.40	0.60	0.21	10.0
PTHF75-180SM	75	0.99	0.30	0.50	0.26	8.0
PTHF100-180SM	100	0.92	0.30	0.40	0.30	6.0

SERIES PTKM-SM FERROUS ALLOY CORE						
PTKM10-50SM	10	7.36	1.70	3.30	0.01	35.0
PTKM25-50SM	25	5.20	1.00	1.90	0.02	10.0
PTKM50-50SM	50	3.93	0.70	1.30	0.04	7.0
PTKM75-50SM	75	3.47	0.60	1.10	0.05	5.0
PTKM100-50SM	100	3.14	0.50	0.96	0.06	4.0
PTKM150-50SM	150	2.33	0.40	0.78	0.10	3.0
PTKM200-50SM	200	1.97	0.35	0.65	0.14	2.0
PTKM250-50SM	250	1.84	0.31	0.59	0.16	1.5
PTKM330-50SM	330	1.69	0.27	0.50	0.19	1.0
PTKM10-40SM	10	4.84	1.30	2.50	0.02	35.0
PTKM25-40SM	25	3.38	0.70	1.30	0.04	20.0
PTKM50-40SM	50	1.90	0.56	1.00	0.11	13.0
PTKM75-40SM	75	1.69	0.45	0.86	0.14	9.0
PTKM100-40SM	100	1.60	0.40	0.76	0.16	6.0
PTKM150-40SM	150	1.45	0.33	0.60	0.19	3.5
PTKM200-40SM	200	1.12	0.30	0.56	0.32	3.0
PTKM250-40SM	250	1.05	0.25	0.48	0.36	2.5
PTKM10-30SM	10	2.56	0.80	1.60	0.05	35.0
PTKM25-30SM	25	2.16	0.50	0.96	0.07	25.0
PTKM50-30SM	50	1.81	0.35	0.68	0.10	10.0
PTKM75-30SM	75	1.62	0.28	0.54	0.13	7.0
PTKM100-30SM	100	1.50	0.23	0.50	0.15	6.0
PTKM150-30SM	150	1.33	0.20	0.40	0.19	3.5
PTKM200-30SM	200	1.04	0.17	0.34	0.30	3.0
PTKM250-30SM	250	0.96	0.15	0.30	0.36	3.0
PTKM10-180SM	10	1.60	0.43	0.86	0.10	35.0
PTKM25-180SM	25	1.33	0.25	0.50	0.15	30.0
PTKM50-180SM	50	1.12	0.18	0.35	0.21	10.0
PTKM75-180SM	75	0.99	0.15	0.28	0.26	8.0
PTKM100-180SM	100	0.92	0.13	0.25	0.30	6.0

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

Axial Lead Power Choke



Mechanical Configuration Units are axial leaded encapsulated in an epoxy molded case.

Physical Parameters

	Inches	Millimeters
Length	0.550 to 0.570	14.00 to 14.48
Diameter	0.205 to 0.225	5.21 to 5.72
Lead Size		
AWG #21 TCW	0.026 to 0.030	0.66 to 0.76
Lead Length	1.25 Min.	31.75 Min.

Operating Temperature -55°C to +125°C

Current Rating at 80°C Ambient 45°C Rise

Test Frequency 1 KHz

Maximum Power Dissipation at 80°C 0.44 W

Incremental Current The current at which the inductance will be decreased by a maximum of 5% from its initial zero DC value.

Packaging Tape & reel: 12" reel, 1000 pieces max.; 14" reel, 1500 pieces max. For additional packaging options, see technical section.

Made in the U.S.A.

DASH NUMBER*	INDUCTANCE @ 1 KHZ (µH) ± 15%	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (Amps)	INCREMENTAL CURRENT (Amps)
SERIES 2256 FERRITE CORE				
-221L	0.22	0.0080	7.00	7.00
-271L	0.27	0.0085	6.75	6.75
-331L	0.33	0.0090	6.50	6.50
-391L	0.39	0.0095	6.25	6.25
-471L	0.47	0.0100	6.00	6.00
-561L	0.56	0.0105	5.80	5.80
-681L	0.68	0.0110	5.70	5.70
-821L	0.82	0.0120	5.60	5.60
-01L	1.00	0.013	5.50	5.50
-02L	1.20	0.018	4.69	4.69
-03L	1.50	0.020	4.45	4.45
-04L	1.80	0.021	4.34	4.34
-05L	2.20	0.029	3.70	3.70
-06L	2.70	0.034	3.41	3.41
-07L	3.30	0.038	3.23	3.23
-08L	3.90	0.042	3.07	3.07
-09L	4.70	0.047	2.90	2.90
-10L	5.60	0.051	2.79	2.79
-11L	6.80	0.058	2.61	2.61
-12L	8.20	0.063	2.51	2.51
-13L	10.0	0.071	2.36	2.36
-14L	12.0	0.079	2.24	2.24
-15L	15.0	0.089	2.11	2.11
-16L	18.0	0.119	1.82	1.82
-17L	22.0	0.152	1.61	1.61
-18L	27.0	0.179	1.48	1.48
-19L	33.0	0.222	1.33	1.33
-20L	39.0	0.315	1.12	1.12
-21L	47.0	0.362	1.04	1.04
-22L	56.0	0.397	1.00	1.00
-23L	68.0	0.418	0.97	0.97
-24L	82.0	0.604	0.81	0.81
-25L	100	0.672	0.76	0.76
-26L	120	0.735	0.73	0.73
-27L	150	0.913	0.63	0.63
-28L	180	1.370	0.53	0.53
-29L	220	1.580	0.50	0.50
-30L	270	1.770	0.47	0.47
-31L	330	2.510	0.39	0.39
-32L	390	2.730	0.38	0.38
-33L	470	3.250	0.35	0.35
-34L	560	3.750	0.33	0.33
-35L	680	4.310	0.30	0.30
-36L	820	6.040	0.26	0.26
-37L	1000	6.900	0.24	0.24
-38L	1200	10.00	0.200	0.200
-39L	1500	12.50	0.178	0.178
-40L	1800	16.00	0.157	0.157
-41L	2200	20.00	0.141	0.141
-42L	2700	23.00	0.131	0.131
-43L	3300	25.00	0.126	0.126
-44L	3900	33.00	0.110	0.110
-45L	4700	37.00	0.103	0.103
-46L	5600	40.00	0.100	0.100
-47L	6800	62.00	0.080	0.080
-48L	8200	66.00	0.077	0.077
-49L	10000	74.00	0.071	0.071
-50L	12000	93.00	0.065	0.065
-51L	15000	105.0	0.061	0.061
-52L	18000	143.0	0.052	0.052
-53L	22000	160.0	0.050	0.050

Optional Tolerances: K=10% J=5%

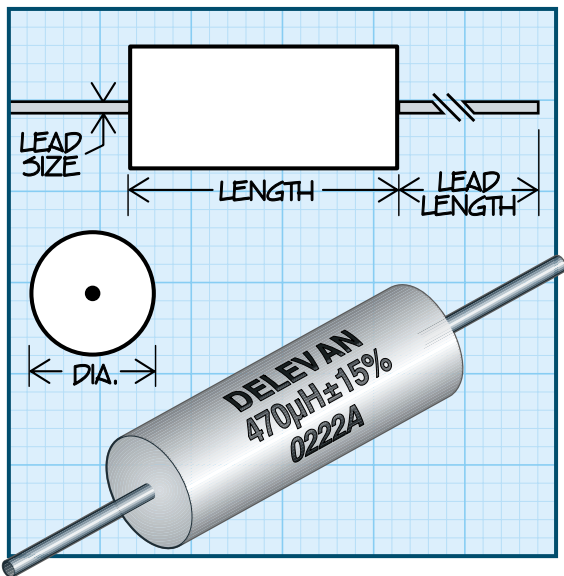
*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

POWER INDUCTORS

Axial Lead Power Inductors

POWER INDUCTORS



Mechanical Configuration Units are axial leaded for thru-hole mounting, encapsulated in an epoxy molded case. High resistivity ferrite core, allows for high inductance with low DC resistance.

Physical Parameters

	Inches	Millimeters
Length	0.740 ± 0.010	18.80 ± 0.25
Diameter	0.240 ± 0.010	6.10 ± 0.25
Lead Size		
AWG #20 TCW	0.032 ± 0.002	0.813 ± 0.051
Lead Length	1.44 ± 0.12	36.58 ± 3.05

Operating Temperature Range -55°C to +125°C

Current Rating 40°C Rise over 85°C Ambient

Maximum Power Dissipation at 85°C .50 W

Inductance Measured at 1 V with no DC current

Incremental Current The current at which the inductance will be decreased by a maximum of 5% from its initial zero DC value.

Weight Max. (Grams) 2.5

Packaging Tape & reel: 12" reel, 1000 pieces max.; 14" reel, 1500 pieces max. For additional packaging options, see technical section.

Made in the U.S.A.

DASH NUMBER*
INDUCTANCE @ 1 KHZ
(µH) ± 15%
DC RESISTANCE
MAXIMUM (OHMS)
CURRENT RATING
MAXIMUM (Amps)
INCREMENTAL
CURRENT (Amps)

SERIES 2474 FERRITE CORE

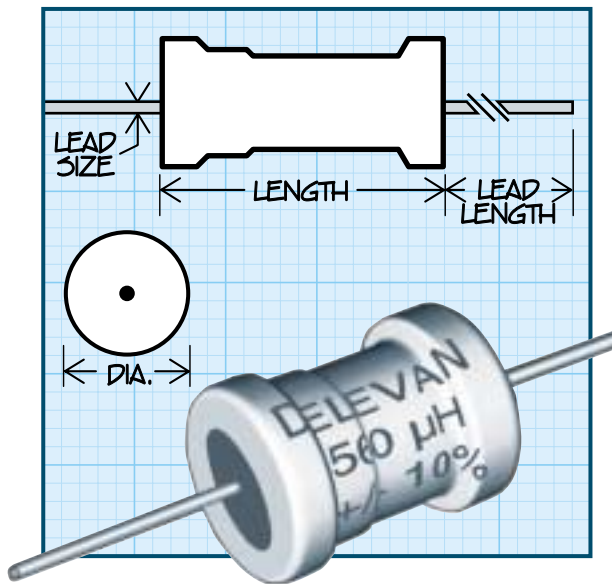
DASH NUMBER*	INDUCTANCE @ 1 KHZ (µH) ± 15%	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (Amps)	INCREMENTAL CURRENT (Amps)
-01L	1.0	0.009	6.27	6.4
-02L	1.2	0.010	5.95	5.8
-03L	1.5	0.011	5.67	5.2
-04L	1.8	0.012	5.43	4.8
-05L	2.2	0.013	5.22	4.3
-06L	2.7	0.014	5.03	3.9
-07L	3.3	0.016	4.70	3.5
-08L	3.9	0.017	4.56	3.2
-09L	4.7	0.022	4.01	2.9
-10L	5.6	0.024	3.84	2.7
-11L	6.8	0.026	3.69	2.5
-12L	8.2	0.028	3.55	2.2
-13L	10.0	0.033	3.27	2.0
-14L	12.0	0.037	3.09	1.8
-15L	15.0	0.040	2.97	1.6
-16L	18.0	0.044	2.84	1.5
-17L	22.0	0.050	2.66	1.4
-18L	27.0	0.070	2.25	1.2
-19L	33.0	0.075	2.17	1.1
-20L	39.0	0.084	2.05	1.0
-21L	47.0	0.104	1.84	0.93
-22L	56.0	0.130	1.65	0.85
-23L	68.0	0.145	1.56	0.77
-24L	82.0	0.152	1.53	0.71
-25L	100.0	0.208	1.30	0.64
-26L	120.0	0.283	1.12	0.58
-27L	150.0	0.330	1.04	0.52
-28L	180.0	0.362	0.99	0.48
-29L	220.0	0.505	0.84	0.43
-30L	270.0	0.557	0.80	0.39
-31L	330.0	0.650	0.74	0.35
-32L	390.0	0.770	0.68	0.32
-33L	470.0	1.03	0.59	0.29
-34L	560.0	1.14	0.56	0.27
-35L	680.0	1.50	0.49	0.25
-36L	820.0	1.98	0.42	0.22
-37L	1000.0	2.30	0.39	0.20
-38L	1200.0	2.55	0.37	0.18
-39L	1500.0	3.00	0.34	0.16
-40L	1800.0	4.00	0.30	0.15
-41L	2200.0	4.40	0.28	0.14
-42L	2700.0	5.80	0.25	0.12
-43L	3300.0	6.56	0.23	0.11
-44L	3900.0	8.63	0.20	0.10
-45L	4700.0	10.1	0.19	0.09
-46L	5600.0	11.2	0.18	0.09
-47L	6800.0	15.0	0.15	0.08
-48L	8200.0	20.8	0.13	0.07
-49L	10000.0	23.4	0.12	0.06
-50L	12000.0	26.0	0.12	0.06
-51L	15000.0	36.0	0.10	0.05
-52L	18000.0	40.0	0.09	0.05

Optional Tolerances: K = 10% J = 5%

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

High Current Filter Inductors



Mechanical Configuration Ferrite Bobbin protected with a flame retardant polyolefin sleeve.

Physical Parameters

	Inches	Millimeters
Length	0.900 Max.	22.86 Max.
Diameter	0.455 Max	11.55 Max
Lead Size		
AWG #20 TCW	0.032 ± 0.002	0.813 ± 0.05
Lead Length	1.10 Min.	27.94 Min.

Operating Temperature

-55°C to +125°C
-55°C to +85°C @ full rated current

Current Rating at 85°C Ambient 40°C Rise

Maximum Power Dissipation at 85°C 0.70 W

Dielectric Withstanding Voltage 2500 V RMS

Inductance Measurement Inductance is measured @ 1KHz with 1 VAC open circuit and 0 dc bias.

Inductance Tolerance Tolerance is specified by suffixing an alpha character to the part number as follows: J = 5%, K = 10%, and L = 15%. Units are normally supplied to the tolerance indicated in table.

Marking Parts are printed with DELEVAN, Inductance Value and Tolerance.

High Saturation Bobbin allows for high inductance with low DCR.

High Resistivity Core offers very high parallel resistance, resulting in maximum coil performance.

Packaging Bulk only

DASH NUMBER*

NOMINAL INDUCTANCE (uH) ±10%

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAXIMUM (AMPS)

INCREMENTAL CURRENT DC (AMPS)

SERIES 4590				
DASH NUMBER*	NOMINAL INDUCTANCE (uH) ±10%	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (AMPS)	INCREMENTAL CURRENT DC (AMPS)
-392K	3.9	0.007	9.75	8.2
-472K	4.7	0.008	9.11	7.5
-562K	5.6	0.011	7.77	6.9
-682K	6.8	0.011	7.60	6.3
-822K	8.2	0.013	7.15	5.7
-103K	10.0	0.016	6.44	5.2
-123K	12.0	0.018	6.07	4.7
-153K	15.0	0.020	5.76	4.3
-183K	18.0	0.022	5.49	3.9
-223K	22.0	0.024	5.26	3.5
-273K	27.0	0.025	5.15	3.2
-333K	33.0	0.028	4.87	2.9
-393K	39.0	0.031	4.63	2.7
-473K	47.0	0.034	4.45	2.5
-563K	56.0	0.043	3.93	2.3
-683K	68.0	0.059	3.355	2.1
-823K	82.0	0.066	3.175	1.9
-104K	100	0.084	2.815	1.7
-124K	120	0.113	2.43	1.6
-154K	150	0.129	2.27	1.4
-184K	180	0.150	2.105	1.3
-224K	220	0.162	2.025	1.2
-274K	270	0.226	1.715	1.1
-334K	330	0.257	1.61	0.95
-394K	390	0.288	1.52	0.88
-474K	470	0.393	1.30	0.80
-564K	560	0.504	1.15	0.74
-684K	680	0.570	1.08	0.67
-824K	820	0.643	1.015	0.61
-105K	1000	0.844	0.89	0.56
-125K	1200	0.977	0.825	0.51
-155K	1500	1.18	0.75	0.46
-185K	1800	1.50	0.665	0.42
-225K	2200	1.76	0.615	0.38
-275K	2700	2.13	0.56	0.34
-335K	3300	2.53	0.51	0.31
-395K	3900	2.84	0.48	0.29
-475K	4700	3.79	0.415	0.26
-565K	5600	4.24	0.395	0.24
-685K	6800	5.75	0.34	0.22
-825K	8200	6.44	0.32	0.20
-106K	10000	7.30	0.30	0.18
-126K	12000	9.34	0.265	0.17
-156K	15000	10.7	0.25	0.15
-186K	18000	14.8	0.21	0.14
-226K	22000	18.0	0.19	0.12
-276K	27000	22.7	0.17	0.11
-336K	33000	25.7	0.16	0.10
-396K	39000	29.7	0.15	0.09
-476K	47000	33.7	0.14	0.09
-566K	56000	38.0	0.13	0.08
-686K	68000	52.8	0.11	0.07
-826K	82000	67.3	0.10	0.07
-107K	100000	76.0	0.09	0.06

Optional Tolerances: J = 5% L = 15%

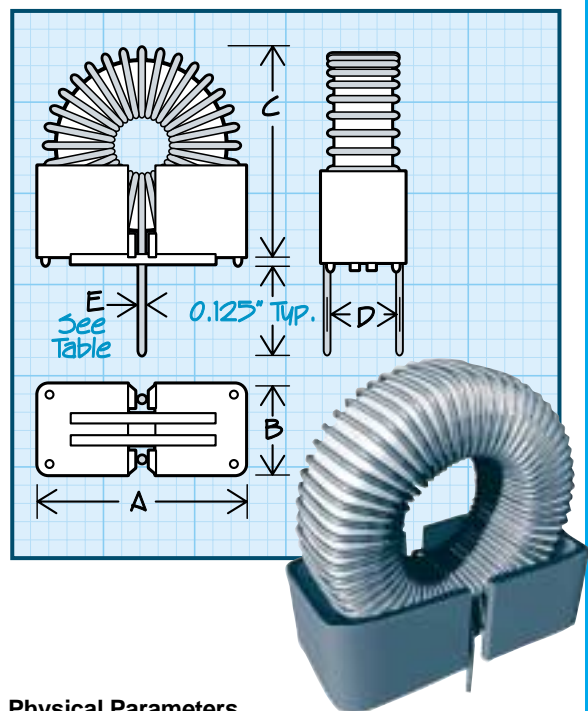
*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Incremental Current is the current which will decrease the inductance by approximately 5%.

High Frequency Switchmode Power Toroid

POWER INDUCTORS



Physical Parameters

SPST-	44	50	68	80	106
A (typ.) in.	0.625	0.700	0.875	0.975	1.300
mm	15.875	17.780	22.225	24.765	33.020
B (typ.) in.	0.350	0.475	0.475	0.625	0.725
mm	8.890	12.065	12.065	15.875	18.415
C (min.) in.	0.700	0.750	0.950	1.100	1.400
mm	17.780	19.050	24.130	27.940	35.560
D (ref.) in.	0.250	0.300	0.300	0.450	0.500
mm	6.350	7.620	7.620	11.430	12.700

Dimension E – see table

Mechanical Configuration

Vertical Mount Power Toroid

Current Rating 40°C rise maximum over 20°C Ambient at rated current

Windings are single layer to maximize operating frequency and maximize board space

Marking Part supplied unmarked; Pre-printed label can be supplied upon request

Leads Tinned leads extending above seating plane

Other values available upon request

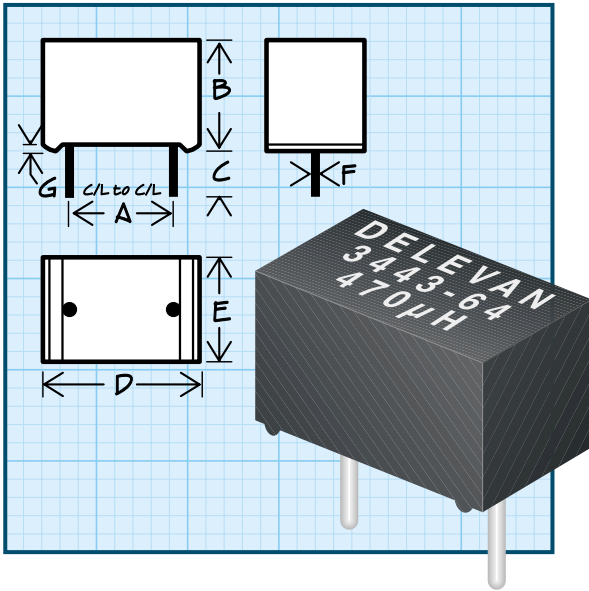
Packaging Bulk only

PART NUMBER*	MINIMUM INDUCTANCE (μH) @ 100 KHz, 0.25V					
	WITHOUT CURRENT	WITH RATED BIAS CURRENT	RATED BIAS CURRENT (ADC)	DC RESISTANCE MAXIMUM (OHMS)	WEIGHT (TYP.) GRAMS	DIMENSION E - LEAD DIAMETER
SERIES SPST						
SPST44-1	18.85	12.72	2.8	0.045	3.6	0.020
SPST44-2	14.75	9.82	3.4	0.031	3.6	0.022
SPST44-3	12.30	7.75	4.0	0.024	3.6	0.025
SPST44-4	8.06	5.22	4.8	0.016	3.6	0.028
SPST50-1	47.70	29.00	2.8	0.079	5.4	0.020
SPST50-2	35.48	23.77	3.4	0.058	5.4	0.022
SPST50-3	27.16	16.13	4.0	0.041	5.4	0.025
SPST50-4	21.65	12.27	4.8	0.030	5.4	0.028
SPST50-5	16.76	9.50	5.7	0.020	5.4	0.032
SPST50-6	12.50	6.75	6.8	0.014	5.4	0.036
SPST50-7	8.86	4.80	8.1	0.011	5.4	0.040
SPST68-1	89.50	57.99	2.8	0.108	11.7	0.020
SPST68-2	71.10	41.59	3.4	0.087	11.7	0.022
SPST68-3	54.81	33.05	4.0	0.060	11.7	0.025
SPST68-4	43.30	26.63	4.8	0.043	11.7	0.028
SPST68-5	33.15	18.79	5.7	0.029	11.7	0.032
SPST68-6	24.31	13.56	6.8	0.021	11.7	0.036
SPST68-7	18.64	10.23	8.1	0.015	11.7	0.040
SPST80-1	128.00	74.04	4.0	0.096	20.3	0.026
SPST80-2	107.50	58.05	4.8	0.068	20.3	0.028
SPST80-3	80.75	42.00	5.7	0.045	20.3	0.032
SPST80-4	65.04	31.60	6.8	0.033	20.3	0.036
SPST80-5	47.70	22.79	8.1	0.023	20.3	0.040
SPST80-6	38.07	18.11	9.7	0.017	20.3	0.045
SPST106-1	253.00	153.00	4.0	0.139	40.5	0.026
SPST106-2	197.00	113.00	4.8	0.106	40.5	0.028
SPST106-3	154.00	84.00	5.7	0.074	40.5	0.032
SPST106-4	116.00	61.90	6.8	0.049	40.5	0.036
SPST106-5	93.00	48.00	8.1	0.040	40.5	0.040
SPST106-6	70.05	35.30	9.7	0.024	40.5	0.045

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Radial Lead Power Chokes



Physical Parameters

	Inches	Millimeters
A	0.500 ± 0.015	12.72 ± 0.38
B	0.600 Max.	15.27 Max.
C	0.375 Min.	9.54 Min.
D	0.870 Max.	22.14 Max.
E	0.515 Max.	13.10 Max.
F**	0.040 ± 0.005	1.02 ± 0.13
G	0.030 Min.	0.76 Min.

**F= AWG #18 TCW

Current Rating Based on continuous operation at room temperature. Derating is required at elevated ambient temperatures in accordance with the derating curve.

Operating Temperature Range -55°C to +125°C

Maximum Power Dissipation at 25°C 2.2 W

Weight Max. (Grams) 12.0

Incremental Current 1) Current Level which causes a maximum of 10% decrease in inductance. **2)** The Incremental Current at ambient temperatures other than 25°C will be 70% of the adjusted current rating.

Core Material Ferrite

Packaging Bulk only

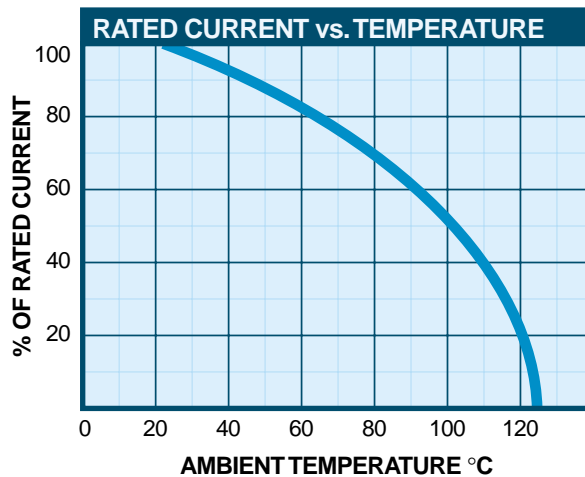
Made in the U.S.A.

DASH NUMBER*
INDUCTANCE @ 1kHz
(µH) ±10%
DC RESISTANCE
MAXIMUM (OHMS)
CURRENT RATING
MAXIMUM (Amps)
INCREMENTAL
CURRENT DC (Amps)

SERIES 3443 FERRITE CORE				
-00K	1.0	0.005	17.8	17.8
-04K	1.5	0.006	16.2	16.2
-08K	2.2	0.007	15.0	15.0
-12K	3.3	0.008	14.0	12.4
-16K	4.7	0.009	13.0	10.3
-20K	6.8	0.010	12.5	8.9
-24K	10.0	0.015	10.0	7.3
-28K	15.0	0.022	8.5	5.9
-32K	22.0	0.033	6.5	4.9
-36K	33.0	0.052	5.5	4.0
-40K	47.0	0.078	4.5	3.3
-44K	68.0	0.092	4.0	2.8
-48K	100.0	0.140	3.3	2.3
-50K	120.0	0.175	3.0	2.1
-52K	150.0	0.210	2.7	1.9
-56K	220.0	0.330	2.2	1.5
-58K	270.0	0.420	1.95	1.35
-60K	330.0	0.510	1.70	1.20
-64K	470.0	0.610	1.60	1.00
-68K	680.0	0.910	1.30	0.90
-72K	1000.0	1.40	1.00	0.73
-76K	1500.0	2.20	0.84	0.60
-80K	2200.0	3.30	0.69	0.49
-84K	3300.0	5.10	0.55	0.40
-88K	4700.0	7.70	0.45	0.34
-92K	6800.0	11.7	0.36	0.28
-94K	10000.0	14.2	0.33	0.23
-98K	15000.0	21.9	0.26	0.19

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

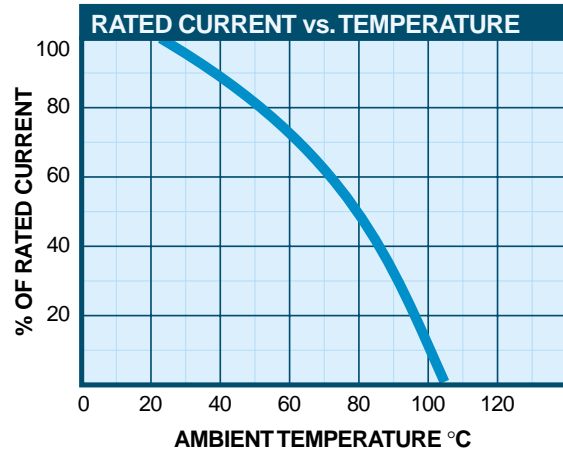
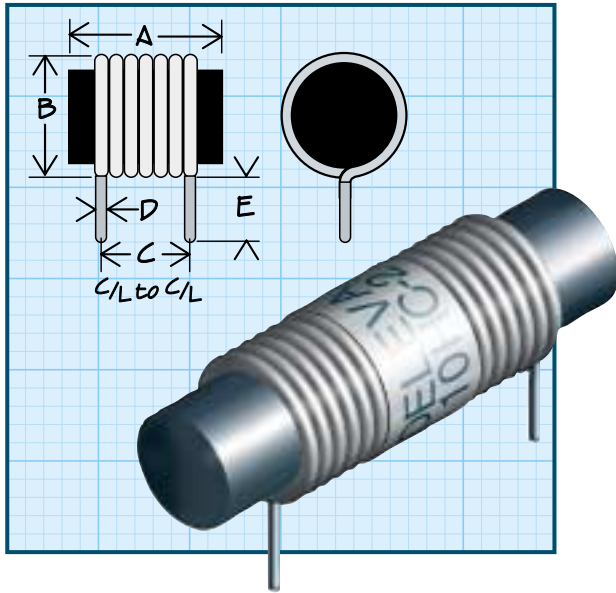


For more detailed graphs, contact factory

POWER INDUCTORS

High Current Filter Chokes

POWER INDUCTORS



Current Rating based on continuous operation at room temperature ambient. Derating is required at elevated ambient temperatures in accordance with the derating curve. For more detailed graphs, contact factory

PART NUMBER*	INDUCTANCE (µH) ± 10% @ 1kHz**		CURRENT RATING MAXIMUM (Amps)	DC RESISTANCE MAX. (OHMS)	INCREMENTAL CURRENT (AMPS)***	DIMENSIONS Inches [Millimeters]				
	A (Max.)	B (Max.)				C ± .062 inches [± 1.59mm]	D ± .005 inches [± 0.13mm]			
SERIES HC FERRITE CORE										
3HC-5	5	3	0.015	19	0.875 [22.23]	0.625 [15.88]	0.500 [12.70]	0.042 [1.07]		
3HC-10	10	3	0.018	17	1.125 [28.58]	0.625 [15.88]	0.687 [17.45]	0.042 [1.07]		
3HC-27	27	3	0.035	15	0.875 [22.23]	0.812 [20.62]	0.437 [11.10]	0.042 [1.07]		
3HC-50	50	3	0.050	12	1.125 [28.58]	0.812 [20.62]	0.750 [19.05]	0.042 [1.07]		
3HC-100	100	3	0.065	8	1.125 [28.58]	0.812 [20.62]	0.937 [23.80]	0.042 [1.07]		
3HC-150	150	3	0.075	5	1.375 [34.93]	0.812 [20.62]	1.062 [26.97]	0.042 [1.07]		
3HC-200	200	3	0.080	4	1.625 [41.28]	0.812 [20.62]	1.050 [26.67]	0.042 [1.07]		
3HC-250	250	3	0.090	3	1.625 [41.28]	0.812 [20.62]	1.312 [33.32]	0.042 [1.07]		
3HC-500	500	3	0.130	1	1.625 [41.28]	0.950 [24.13]	0.990 [25.15]	0.042 [1.07]		
5HC-5	5	5	0.012	20	0.875 [22.23]	0.640 [16.26]	0.750 [19.05]	0.053 [1.35]		
5HC-10	10	5	0.015	18	1.125 [28.58]	0.640 [16.26]	1.000 [25.40]	0.053 [1.35]		
5HC-27	27	5	0.025	15	0.875 [22.23]	0.875 [22.23]	0.562 [14.27]	0.053 [1.35]		
5HC-50	50	5	0.030	10	1.125 [28.58]	0.875 [22.23]	0.750 [19.05]	0.053 [1.35]		
5HC-68	68	5	0.035	9	1.125 [28.58]	0.875 [22.23]	0.875 [22.23]	0.053 [1.35]		
5HC-100	100	5	0.050	7	1.375 [34.93]	0.875 [22.23]	1.000 [25.40]	0.053 [1.35]		
5HC-150	150	5	0.060	5	1.625 [41.28]	0.875 [22.23]	1.250 [31.75]	0.053 [1.35]		
5HC-250	250	5	0.075	3	1.625 [41.28]	1.100 [27.94]	0.900 [22.86]	0.053 [1.35]		
10HC-5	5	10	0.010	19	1.125 [28.58]	0.687 [17.45]	0.812 [20.62]	0.065 [1.65]		
10HC-10	10	10	0.012	17	1.375 [34.93]	0.687 [17.45]	1.218 [30.94]	0.065 [1.65]		
10HC-15	15	10	0.015	16	1.625 [41.28]	0.687 [17.45]	1.415 [35.94]	0.065 [1.65]		
10HC-27	27	10	0.018	15	1.125 [28.58]	0.937 [23.80]	0.687 [17.45]	0.065 [1.65]		
10HC-50	50	10	0.025	9	1.375 [34.93]	0.937 [23.80]	0.937 [23.80]	0.065 [1.65]		
10HC-68	68	10	0.027	9	1.375 [34.93]	0.937 [23.80]	1.125 [28.58]	0.065 [1.65]		
10HC-100	100	10	0.030	6	1.625 [41.28]	0.937 [23.80]	1.312 [33.32]	0.065 [1.65]		
15HC-5	5	15	0.008	20	1.375 [34.93]	0.725 [18.42]	0.937 [23.80]	0.082 [2.08]		
15HC-10	10	15	0.010	17	1.687 [42.85]	0.725 [18.42]	1.500 [38.10]	0.082 [2.08]		
15HC-27	27	15	0.015	14	1.375 [34.93]	1.000 [25.40]	0.937 [23.80]	0.082 [2.08]		
15HC-50	50	15	0.020	9	1.625 [41.28]	1.000 [25.40]	1.125 [28.58]	0.082 [2.08]		
15HC-100	100	15	0.030	5	1.625 [41.28]	1.500 [38.10]	1.312 [33.32]	0.082 [2.08]		

Dimension E
1.0 inches ± 1/16 inches;
25.4mm ± 1.59mm

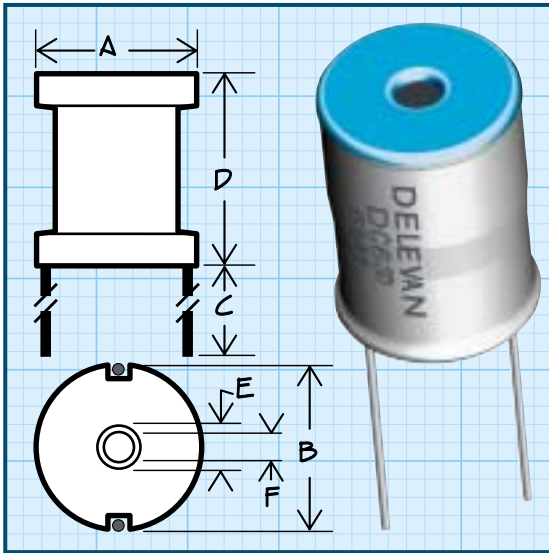
Notes
** Inductance measured with zero DC current.
*** Incremental current reduces inductance by 10% or less. Average current must not exceed specified rated current.

Packaging Bulk only

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

High Current Power Line Chokes



Physical Parameters

	Inches	Millimeters
A	0.630 ± 0.030	16.0 ± 0.762
B (C/L to C/L)	See Characteristics table	
C	0.750 Min.	19.05 Min.
D	0.810 ± 0.020	20.57 ± 0.508
E (Ref. only)	0.195 Max.	4.95 Max.
F	Clearance Hole for 4/40 Screw	

Leads Tinned to within 1/16" of Body

Inductance

Measured @ 10 KHz, 25mAdc and 0 Adc @ 25°C

Mechanical Configuration Insulated Ferrite Bobbin protected with a flame retardant polyolefin sleeve; Center hole allows for mechanical mounting

Operating Temperature

-55°C to +125°C;
-55°C to +80°C @ full rated current

Current Rating at 80°C Ambient 45°C Rise

Incremental Current Minimum current which causes a 5% max. change in Inductance

Power Dissipation at 80°C 1.00 Watts Max.

Dielectric Withstanding Voltage 1000 V RMS Min.

Marking Parts printed with DELEVAN and API Part Number

Packaging Bulk only

DASH NUMBER*

NOMINAL INDUCTANCE

TOLERANCE

DC RESISTANCE MAX. (OHMS) @ 25°C

CURRENT RATING MAXIMUM (A DC)

INCREMENTAL CURRENT (A DC)

DIMENSION B (Approx. Inches)

LEAD DIAMETER (Inches)

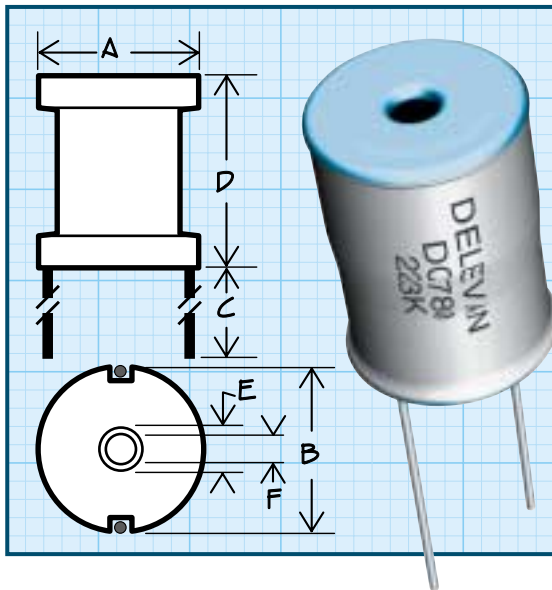
SERIES DC630							
-102M	1.0	± 20%	0.003	14.00	68.0	0.490	0.051
-152M	1.5	± 20%	0.004	13.50	55.5	0.490	0.051
-222M	2.2	± 20%	0.005	12.80	46.0	0.490	0.051
-272M	2.7	± 20%	0.005	12.80	42.0	0.490	0.051
-332M	3.3	± 20%	0.005	12.80	38.0	0.490	0.051
-392M	3.9	± 20%	0.006	12.30	34.5	0.490	0.051
-472M	4.7	± 20%	0.007	11.70	31.5	0.490	0.051
-562M	5.6	± 20%	0.007	11.70	29.0	0.490	0.051
-682M	6.8	± 20%	0.008	10.50	26.0	0.490	0.051
-822M	8.2	± 20%	0.009	10.00	24.0	0.490	0.051
-103K	10.0	± 10%	0.010	9.50	21.5	0.490	0.051
-123K	12.0	± 10%	0.011	9.10	19.5	0.490	0.051
-153K	15.0	± 10%	0.015	8.09	17.5	0.470	0.045
-183K	18.0	± 10%	0.020	7.00	16.0	0.460	0.040
-223K	22.0	± 10%	0.025	6.26	14.5	0.460	0.040
-273K	27.0	± 10%	0.030	5.72	13.2	0.440	0.036
-333K	33.0	± 10%	0.040	4.95	11.9	0.430	0.032
-393K	39.0	± 10%	0.050	4.43	10.9	0.420	0.029
-473K	47.0	± 10%	0.062	3.98	10.0	0.480	0.029
-563K	56.0	± 10%	0.069	3.77	9.20	0.480	0.029
-683K	68.0	± 10%	0.077	3.57	8.30	0.480	0.029
-823K	82.0	± 10%	0.083	3.44	7.60	0.480	0.029
-104K	100	± 10%	0.095	3.21	6.80	0.480	0.029
-124K	120	± 10%	0.100	3.12	6.20	0.480	0.029
-154K	150	± 10%	0.111	2.97	5.60	0.480	0.029
-184K	180	± 10%	0.125	2.80	5.10	0.480	0.029
-224K	220	± 10%	0.168	2.42	4.60	0.470	0.025
-274K	270	± 10%	0.225	2.09	4.20	0.450	0.023
-334K	330	± 10%	0.315	1.72	3.80	0.450	0.020
-394K	390	± 10%	0.342	1.66	3.40	0.480	0.020
-474K	470	± 10%	0.377	1.58	3.10	0.480	0.020
-564K	560	± 10%	0.408	1.52	2.90	0.480	0.020
-684K	680	± 10%	0.468	1.42	2.60	0.480	0.020

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

High Current Power Line Chokes

POWER INDUCTORS



Physical Parameters

	Inches	Millimeters
A	0.775 ± 0.025	19.6 ± 0.6
B (C/L to C/L)	See Characteristics table	
C	0.750 Min.	19.05 Min.
D	0.815 ± 0.015	20.7 ± 0.4
E (Ref. only)	0.195 Max.	4.95 Max.
F	Clearance Hole for 4/40 Screw	

Leads Tinned to within 1/16" of Body

Inductance Measured @ 1 KHz with 0 Amps dc

Mechanical Configuration Ferrite Bobbin protected with a flame retardant polyolefin sleeve; center hole allows for mechanical mounting; insulated bobbins.

Operating Temperature

-55°C to +125°C;
-55°C to +80°C @ full rated current

Current Rating at 80°C Ambient 45°C Rise

Incremental Current Minimum current which causes a 5% max. change in Inductance

Power Dissipation at 80°C 1.400 Watts Max.

Dielectric Withstanding Voltage 1000 V RMS Min.

Marking Parts printed with DELEVAN and API Part Number

Packaging Bulk only

DASH NUMBER*

NOMINAL INDUCTANCE (µH)

TOLERANCE

DC RESISTANCE MAX. (OHMS) @ 25°C

CURRENT RATING MAXIMUM (A DC)

INCREMENTAL CURRENT (A DC)

DIMENSION B (Approx. Inches)

LEAD DIAMETER (Inches)

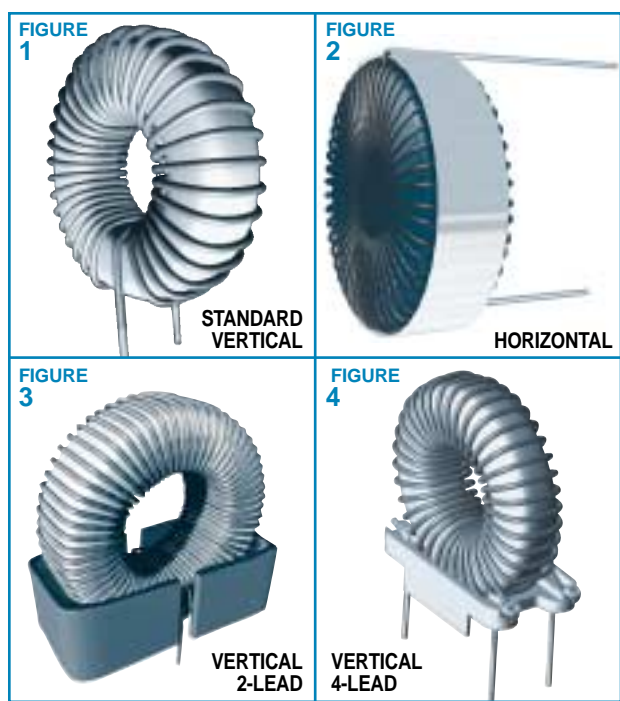
SERIES DC780							
-102L	1.0	± 15%	0.003	11.4	110.0	0.620	0.051
-122L	1.2	± 15%	0.003	11.4	108.0	0.620	0.051
-152L	1.5	± 15%	0.003	11.4	89.0	0.620	0.051
-182L	1.8	± 15%	0.003	11.4	81.0	0.620	0.051
-222L	2.2	± 15%	0.004	11.4	73.0	0.620	0.051
-272L	2.7	± 15%	0.005	11.4	66.0	0.620	0.051
-332L	3.3	± 15%	0.005	11.4	60.0	0.620	0.051
-392L	3.9	± 15%	0.005	11.4	55.0	0.620	0.051
-472L	4.7	± 15%	0.005	11.4	50.0	0.620	0.051
-562L	5.6	± 15%	0.006	11.4	46.0	0.620	0.051
-682L	6.8	± 15%	0.007	11.4	42.0	0.620	0.051
-822L	8.2	± 15%	0.007	11.4	38.0	0.620	0.051
-103K	10.0	± 10%	0.009	11.4	34.5	0.620	0.051
-123K	12.0	± 10%	0.009	11.4	31.5	0.620	0.051
-153K	15.0	± 10%	0.013	9.0	28.2	0.625	0.045
-183K	18.0	± 10%	0.018	7.2	25.7	0.630	0.045
-223K	22.0	± 10%	0.019	7.2	23.3	0.630	0.045
-273K	27.0	± 10%	0.026	5.5	21.0	0.546	0.040
-333K	33.0	± 10%	0.029	5.5	19.0	0.546	0.036
-393K	39.0	± 10%	0.030	5.5	17.5	0.594	0.036
-473K	47.0	± 10%	0.035	5.5	15.9	0.625	0.036
-563K	56.0	± 10%	0.039	5.5	14.6	0.625	0.036
-683K	68.0	± 10%	0.053	4.8	13.2	0.656	0.036
-823K	82.0	± 10%	0.060	4.8	12.1	0.656	0.036
-104K	100	± 10%	0.080	4.0	10.9	0.593	0.036
-124K	120	± 10%	0.090	4.0	10.0	0.593	0.036
-154K	150	± 10%	0.098	4.0	8.9	0.593	0.032
-184K	180	± 10%	0.110	4.0	8.1	0.593	0.032
-224K	220	± 10%	0.150	2.8	7.4	0.593	0.029
-274K	270	± 10%	0.213	2.0	6.6	0.562	0.025
-334K	330	± 10%	0.305	1.6	6.0	0.590	0.025
-394K	390	± 10%	0.320	1.6	5.5	0.590	0.025
-474K	470	± 10%	0.355	1.6	5.0	0.590	0.025
-564K	560	± 10%	0.388	1.6	4.6	0.590	0.023
-684K	680	± 10%	0.430	1.6	4.2	0.590	0.023
-824K	820	± 10%	0.590	1.3	3.8	0.590	0.023
-105K	1,000	± 10%	0.818	1.0	3.5	0.590	0.020
-125K	1,200	± 10%	1.140	0.8	3.2	0.590	0.018
-155K	1,500	± 10%	1.260	0.8	2.8	0.590	0.018
-185K	1,800	± 10%	1.390	0.8	2.6	0.590	0.018
-225K	2,200	± 10%	1.540	0.8	2.3	0.590	0.018

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Power Toroids - Horizontal or Vertical Mount

Inductance tested at 1 KHz, <10 gauss and 0 Adc
DC Resistance at 25°C
Rated Idc based on 40°C maximum rise from 25°C ambient with 0 Arms
Windings single layered to maximize operating frequency and minimize board space
Self leads solder coated to within .050" of seating plane
Other values available on request
Packaging Bulk only
Mounting Standard mounting is self-lead radial per Figure "1". Optional mounting methods are self-leaded horizontal per Figure "2" or vertical base mounted per Figures "3" and "4".



PART NUMBER*	IND (µH) ± 15% @ 1 KHz	DCR MAX. (OHMS)	RATED Idc (Amps)	MOUNTING AVAILABLE			
				FIG. "1" VERTICAL	FIG. "2" HORIZONTAL	FIG. "3" VERTICAL	FIG. "4" 4-LEAD VERTICAL
PT SERIES POWER TOROIDS							
PT5-530	5	0.015	6.1	•	•	•	
PT5-700	5	0.012	7.4	•	•	•	
PT5-800	5	0.010	10.6	•	•	•	
PT5-1000	5	0.008	12.8	•	•	•	
PT10-530	10	0.020	4.9	•	•	•	
PT10-680	10	0.015	6.8	•	•	•	
PT10-820	10	0.010	9.3	•	•	•	
PT10-990	10	0.008	13.2	•	•	•	
PT25-680	25	0.035	4.4	•	•	•	
PT25-800	25	0.025	6.6	•	•	•	
PT25-900	25	0.020	7.0	•	•	•	
PT25-1000	25	0.014	10.4	•	•	•	
PT50-780	50	0.050	3.8	•	•	•	
PT50-900	50	0.030	5.6	•	•	•	
PT50-1020	50	0.025	7.0	•	•	•	
PT50-1320	50	0.020	11.0	•	•	•	
PT75-900	75	0.060	3.9	•	•	•	
PT75-980	75	0.040	5.2	•	•	•	
PT75-1260	75	0.035	7.4	•	•	•	
PT75-1550	75	0.025	10.6	•	•	•	
PT100-1000	100	0.080	3.5	•	•	•	
PT100-1100	100	0.050	5.1	•	•	•	
PT100-1260	100	0.035	7.8	•	•	•	
PT100-1550	100	0.028	10.3	•	•	•	
PT150-1040	150	0.100	3.4	•	•	•	
PT150-1250	150	0.060	5.7	•	•	•	
PT150-1500	150	0.050	7.7	•	•	•	•
PT150-2050	150	0.040	12.3	•	•	•	
PT250-1200	250	0.130	3.8	•	•	•	
PT250-1500	250	0.080	6.1	•	•	•	•
PT250-1800	250	0.055	9.1	•	•	•	
PT300-1200	300	0.150	3.3	•	•	•	
PT300-1500	300	0.100	5.5	•	•	•	•
PT300-1750	300	0.075	7.3	•	•	•	
PT400-1200	400	0.250	2.4	•	•	•	
PT400-1500	400	0.180	4.7	•	•	•	•
PT400-1750	400	0.110	6.0	•	•	•	
PT500-1450	500	0.220	3.4	•	•	•	
PT500-1750	500	0.160	5.0	•	•	•	
PT500-2000	500	0.090	8.0	•	•	•	
PT750-1400	750	0.350	2.6	•	•	•	
PT750-1700	750	0.280	3.7	•	•	•	
PT750-2050	750	0.150	6.4	•	•	•	
PT1000-1400	1000	0.620	1.8	•	•	•	
PT1000-1750	1000	0.420	3.1	•	•	•	
PT1000-2050	1000	0.200	5.9	•	•	•	

*Complete part # must include series # PLUS the dash #
 For further surface finish information, refer to TECHNICAL section of this catalog.

Notes to Figure 5 (Page 100) The PT Toroid Series inductance is specified at AC and DC signal levels which have no significant effect on the permeability of the powdered iron toroidal core. Superimposed AC and DC voltages will change the permeability and therefore the inductance, under operating conditions. Typically, DC currents will reduce the inductance, while AC signals will increase the inductance up to a point, before beginning to decrease. Supporting information is provided, detailing the AC or DC effects upon each part. Saturation resulting from DC currents is specified with waveform having less than a 1% ripple content. When considering the AC waveform, both the frequency and voltage level must be taken into account. As an aid in defining what effect the alternating sine wave signal will have, the voltage/frequency factor curve can be used. To determine what change of inductance can be expected at a given voltage level and frequency, simply divide the sinusoidal RMS voltage by the frequency. The voltage is in volts and the frequency is in hertz. As an example, if using part number PT25-680 at a 1VRMS signal level, and a frequency of 25KHz, the voltage/frequency factor is calculated to be: 1VRMS/25,000Hz = 40 x 10⁻⁶. Referring to the graph, a 39% increase in inductance would be expected.

Notes to Figure 6 (Page 100) Typical saturation effects as a function of DC flowing through the part. Data is representative of a DC waveform with less than 1% ripple, and an AC waveform less than 10 gauss.

Note This information is intended to be used in assisting the designer in part selection. Each operating application may contain other variables which must be considered in part selection; such as temperature effects, waveform distortion, etc... Delevan Sales/Engineering staff is available to provide information as needed to fit each application.

**PT Series
Power Toroids**

ELECTRICAL

PHYSICAL PARAMETERS

PART NUMBER

IND.(μH) ± 15% @ 1 KHZ

DCR MAX. (OHMS)

RATED Idc (Amps)

Inches

A Max.
mm

Inches

B Max.
mm

Inches

C Nominal
mm

Inches

D Min.
mm

Inches

E Nominal
mm

Inches

F Nominal
mm

PT SERIES POWER TOROIDS

PT5-530	5	0.015	6.1	0.53	13.46	0.23	5.84	0.17	4.32	0.50	12.7	0.025	0.64	0.450	11.43
PT5-700	5	0.012	7.4	0.70	17.78	0.33	8.38	0.24	6.10	0.50	12.7	0.032	0.81	0.600	15.24
PT5-800	5	0.010	10.6	0.80	20.32	0.36	9.14	0.31	7.87	0.50	12.7	0.040	1.02	0.720	18.30
PT5-1000	5	0.008	12.8	1.00	25.40	0.40	10.16	0.34	8.64	0.50	12.7	0.051	1.30	0.950	24.13
PT10-530	10	0.020	4.9	0.53	13.46	0.23	5.84	0.17	4.32	0.50	12.7	0.025	0.64	0.450	11.43
PT10-680	10	0.015	6.8	0.68	17.27	0.33	8.38	0.24	6.10	0.50	12.7	0.032	0.81	0.600	15.24
PT10-820	10	0.010	9.3	0.82	20.83	0.37	9.40	0.29	7.37	0.50	12.7	0.040	1.02	0.720	18.30
PT10-990	10	0.008	13.2	0.99	25.15	0.40	10.16	0.34	8.64	0.50	12.7	0.051	1.30	0.950	24.13
PT25-680	25	0.035	4.4	0.68	17.27	0.37	9.40	0.29	7.37	0.50	12.7	0.025	0.64	0.580	14.73
PT25-800	25	0.025	6.6	0.80	20.32	0.35	8.89	0.28	7.11	0.50	12.7	0.032	0.81	0.700	17.78
PT25-900	25	0.020	7.0	0.90	22.86	0.40	10.16	0.30	7.62	0.50	12.7	0.040	1.02	0.820	20.83
PT25-1000	25	0.014	10.4	1.00	25.40	0.40	10.16	0.37	9.40	0.50	12.7	0.051	1.30	0.950	24.13
PT50-780	50	0.050	3.8	0.78	19.81	0.36	9.14	0.27	6.86	0.50	12.7	0.025	0.64	0.680	17.27
PT50-900	50	0.030	5.6	0.90	22.86	0.38	9.65	0.30	7.62	0.50	12.7	0.032	0.81	0.790	20.07
PT50-1020	50	0.025	7.0	1.02	25.91	0.62	15.75	0.43	10.92	0.50	12.7	0.040	1.02	0.920	23.37
PT50-1320	50	0.020	11.0	1.32	33.53	0.63	16.00	0.53	13.46	0.50	12.7	0.051	1.30	1.220	30.99
PT75-900	75	0.060	3.9	0.90	22.86	0.36	9.14	0.29	7.37	0.50	12.7	0.025	0.64	0.770	19.56
PT75-980	75	0.040	5.2	0.98	24.89	0.38	9.65	0.30	7.62	0.50	12.7	0.032	0.81	0.890	22.61
PT75-1260	75	0.035	7.4	1.26	32.00	0.60	15.24	0.49	12.45	0.50	12.7	0.040	1.02	1.200	30.48
PT75-1550	75	0.025	10.6	1.55	39.37	0.64	16.26	0.53	13.46	0.50	12.7	0.051	1.30	1.500	38.10
PT100-1000	100	0.080	3.5	1.00	25.40	0.36	9.14	0.29	7.37	0.50	12.7	0.025	0.64	0.880	22.35
PT100-1100	100	0.050	5.1	1.10	27.94	0.50	12.70	0.42	10.67	0.50	12.7	0.032	0.81	0.890	22.61
PT100-1260	100	0.035	7.8	1.26	32.00	0.60	15.24	0.49	12.45	0.50	12.7	0.040	1.02	1.200	30.48
PT100-1550	100	0.028	10.3	1.55	39.37	0.64	16.26	0.53	13.46	0.50	12.7	0.051	1.30	1.500	38.10
PT150-1040	150	0.100	3.4	1.04	26.42	0.50	12.70	0.41	10.41	0.50	12.7	0.025	0.64	0.880	22.35
PT150-1250	150	0.060	5.7	1.25	31.75	0.58	14.73	0.48	12.19	0.50	12.7	0.032	0.81	1.160	29.46
PT150-1500	150	0.050	7.7	1.50	38.10	0.62	15.75	0.50	12.70	0.50	12.7	0.040	1.02	1.420	36.07
PT150-2050	150	0.040	12.3	2.05	52.07	0.92	23.37	0.80	20.32	0.50	12.7	0.051	1.30	2.000	50.80
PT250-1200	250	0.130	3.8	1.20	30.48	0.55	13.97	0.49	12.45	0.50	12.7	0.025	0.64	1.200	30.48
PT250-1500	250	0.080	6.1	1.50	38.10	0.60	15.24	0.50	12.70	0.50	12.7	0.036	0.91	1.450	36.83
PT250-1800	250	0.055	9.1	1.80	45.72	0.77	19.56	0.69	17.53	0.50	12.7	0.051	1.30	1.750	44.45
PT300-1200	300	0.150	3.3	1.20	30.48	0.55	13.97	0.48	12.19	0.50	12.7	0.025	0.64	1.200	30.48
PT300-1500	300	0.100	5.5	1.50	38.10	0.60	15.24	0.51	12.95	0.50	12.7	0.032	0.81	1.400	35.56
PT300-1750	300	0.075	7.3	1.75	44.45	0.76	19.30	0.65	16.51	0.50	12.7	0.045	1.14	1.750	44.45
PT400-1200	400	0.250	2.4	1.20	30.48	0.55	13.97	0.48	12.19	0.50	12.7	0.020	0.51	1.150	29.21
PT400-1500	400	0.180	4.7	1.50	38.10	0.60	15.24	0.50	12.70	0.50	12.7	0.025	0.64	1.400	35.56
PT400-1750	400	0.110	6.0	1.75	44.45	0.78	19.81	0.70	17.78	0.50	12.7	0.040	1.02	1.750	44.45
PT500-1450	500	0.220	3.4	1.45	36.83	0.58	14.73	0.50	12.70	0.50	12.7	0.025	0.64	1.400	35.56
PT500-1750	500	0.160	5.0	1.75	44.45	0.75	19.05	0.62	15.75	0.50	12.7	0.036	0.91	1.700	43.18
PT500-2000	500	0.090	8.0	2.05	52.07	0.88	22.35	0.76	19.30	0.50	12.7	0.045	1.14	2.000	50.80
PT750-1400	750	0.350	2.6	1.40	35.56	0.55	13.97	0.48	12.19	0.50	12.7	0.020	0.51	1.400	35.56
PT750-1700	750	0.280	3.7	1.70	43.18	0.70	17.78	0.62	15.75	0.50	12.7	0.025	0.64	1.660	42.16
PT750-2050	750	0.150	6.4	2.05	52.07	0.85	21.59	0.78	19.81	0.50	12.7	0.036	0.91	2.000	50.80
PT1000-1400	1000	0.620	1.8	1.40	35.56	0.55	13.97	0.48	12.19	0.50	12.7	0.016	0.41	1.360	34.54
PT1000-1750	1000	0.420	3.1	1.75	44.45	0.70	17.78	0.62	15.75	0.50	12.7	0.025	0.64	1.660	42.16
PT1000-2050	1000	0.200	5.9	2.05	52.07	0.85	21.59	0.78	19.81	0.50	12.7	0.032	0.81	2.000	50.80

POWER INDUCTORS

Note: Vertical configuration is standard; add suffix "HM" for horizontal mounting

Figure 1: Standard Vertical Mount

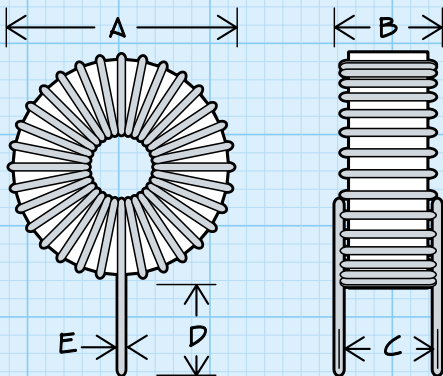
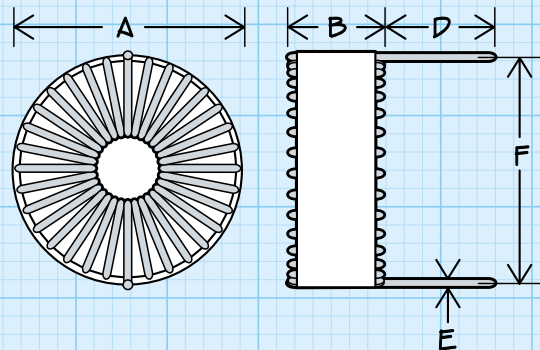


Figure 2: Horizontal Mount



PT Series
Power Toroids

ELECTRICAL

PHYSICAL PARAMETERS

PART NUMBER

IND (μ H) \pm 15% @ 1 KHz

DCR MAX. (OHMS)

RATED I_{dc} (Amps)

FIGURE #

Inches

A Max.
mm

Inches

B Max.
mm

Inches

C Typical
mm

Inches

D Typical
mm

Inches

E Max.
mm

Inches

F Typical
mm

Inches

PT SERIES VERTICAL MOUNT POWER TOROIDS

PT5-530-VM	5	0.015	6.1	3	0.580	14.73	0.340	8.64	0.220	5.59	0.025	0.63	0.640	16.26	0.290	7.37
PT5-700-VM	5	0.012	7.4	3	0.650	16.51	0.450	11.43	0.300	7.62	0.032	0.81	0.810	20.57	0.325	8.25
PT5-800-VM	5	0.010	10.6	3	0.830	21.08	0.450	11.43	0.300	7.62	0.040	1.02	0.910	23.11	0.415	10.54
PT10-530-VM	10	0.020	4.9	3	0.580	14.73	0.340	8.64	0.220	5.59	0.025	0.63	0.640	16.26	0.290	7.37
PT10-680-VM	10	0.015	6.8	3	0.650	16.51	0.450	11.43	0.300	7.62	0.032	0.81	0.790	20.07	0.325	8.25
PT10-820-VM	10	0.010	9.3	3	0.830	21.08	0.450	11.43	0.300	7.62	0.040	1.02	0.930	23.62	0.415	10.54
PT25-680-VM	25	0.035	4.4	3	0.650	16.51	0.450	11.43	0.300	7.62	0.025	0.63	0.790	20.07	0.325	8.25
PT25-800-VM	25	0.025	6.6	3	0.830	21.08	0.450	11.43	0.300	7.62	0.032	0.81	0.910	23.11	0.415	10.54
PT25-900-VM	25	0.020	7.0	3	0.950	24.13	0.600	15.24	0.450	11.43	0.040	1.02	1.010	25.65	0.475	12.06
PT50-780-VM	50	0.050	3.8	3	0.830	21.08	0.450	11.43	0.300	7.62	0.025	0.63	0.890	22.61	0.415	10.54
PT50-900-VM	50	0.030	5.6	3	0.830	21.08	0.450	11.43	0.300	7.62	0.032	0.81	1.110	28.19	0.415	10.54
PT50-1020-VM	50	0.025	7.0	3	1.250	31.75	0.700	17.78	0.500	12.70	0.040	1.02	1.130	28.70	0.625	15.87
PT75-900-VM	75	0.060	3.9	3	0.950	24.13	0.600	15.24	0.450	11.43	0.025	0.63	1.010	25.65	0.475	12.06
PT75-980-VM	75	0.040	5.2	3	0.950	24.13	0.600	15.24	0.450	11.43	0.032	0.81	1.090	27.69	0.475	12.06
PT75-1260-VM	75	0.035	7.4	3	1.250	31.75	0.700	17.78	0.500	12.70	0.040	1.02	1.390	35.31	0.625	15.87
PT100-1000-VM	100	0.080	3.5	3	0.950	24.13	0.600	15.24	0.450	11.43	0.025	0.63	1.130	28.70	0.475	12.06
PT100-1100-VM	100	0.050	5.1	3	0.950	24.13	0.600	15.24	0.450	11.43	0.032	0.81	1.230	31.24	0.475	12.06
PT100-1260-VM	100	0.035	7.8	3	1.250	31.75	0.700	17.78	0.500	12.70	0.040	1.02	1.390	35.31	0.625	15.87
PT150-1040-VM	150	0.100	3.4	3	0.950	24.13	0.600	15.24	0.450	11.43	0.025	0.63	1.170	29.72	0.475	12.06
PT150-1250-VM	150	0.060	5.7	3	1.250	31.75	0.700	17.78	0.500	12.70	0.032	0.81	1.380	35.05	0.625	15.87
PT150-1500-VM	150	0.050	7.7	4	1.500	38.10	0.800	20.32	0.600	15.24	0.050	1.27	1.630	41.40	0.900	22.86
PT250-1200-VM	250	0.130	3.8	3	1.250	31.75	0.700	17.78	0.500	12.70	0.025	0.63	1.330	33.78	0.625	15.87
PT250-1500-VM	250	0.080	6.1	4	1.500	38.10	0.800	20.32	0.600	15.24	0.050	1.27	1.630	41.40	0.900	22.86
PT300-1200-VM	300	0.150	3.3	3	1.250	31.75	0.700	17.78	0.500	12.70	0.025	0.63	1.330	33.78	0.625	15.87
PT300-1500-VM	300	0.100	5.5	4	1.500	38.10	0.800	20.32	0.600	15.24	0.050	1.27	1.630	41.40	0.900	22.86
PT400-1200-VM	400	0.250	2.4	3	1.250	31.75	0.700	17.78	0.500	12.70	0.020	0.51	1.330	33.78	0.625	15.87
PT400-1500-VM	400	0.180	4.7	4	1.500	38.10	0.800	20.32	0.600	15.24	0.050	1.27	1.630	41.40	0.900	22.86
PT400-1750-VM	400	0.110	6.0	4	1.750	44.45	0.900	22.86	0.700	17.78	0.050	1.27	1.880	47.75	1.200	30.48
PT500-1450-VM	500	0.220	3.4	4	1.450	36.83	0.800	20.32	0.600	15.24	0.050	1.27	1.580	40.13	0.900	22.86
PT500-1750-VM	500	0.160	5.0	4	1.750	44.45	0.900	22.86	0.700	17.78	0.050	1.27	1.880	47.75	1.200	30.48
PT750-1400-VM	750	0.350	2.6	4	1.400	35.56	0.800	20.32	0.600	15.24	0.050	1.27	1.530	38.86	0.900	22.86
PT750-1700-VM	750	0.280	3.7	4	1.700	43.18	0.900	22.86	0.700	17.78	0.050	1.27	1.830	46.48	1.200	30.48
PT750-2050-VM	750	0.150	6.4	4	2.050	52.07	0.900	22.86	0.700	17.78	0.050	1.27	2.180	55.37	1.200	30.48
PT1000-1400-VM	1000	0.620	1.8	4	1.400	35.56	0.800	20.32	0.600	15.24	0.050	1.27	1.530	38.86	0.900	22.86
PT1000-1750-VM	1000	0.420	3.1	4	1.750	44.45	0.900	22.86	0.700	17.78	0.050	1.27	1.980	50.29	1.200	30.48
PT1000-2050-VM	1000	0.200	5.9	4	2.050	52.07	0.900	22.86	0.700	17.78	0.050	1.27	2.180	55.37	1.200	30.48

POWER INDUCTORS

Figure 3: 2-Lead Vertical Base Mount

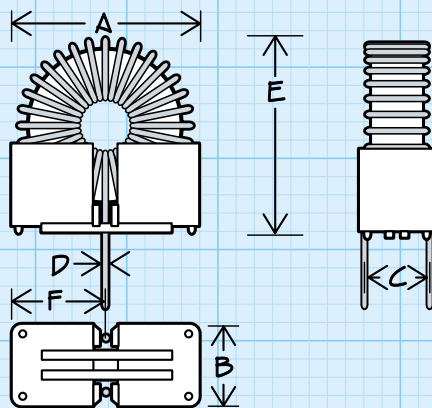
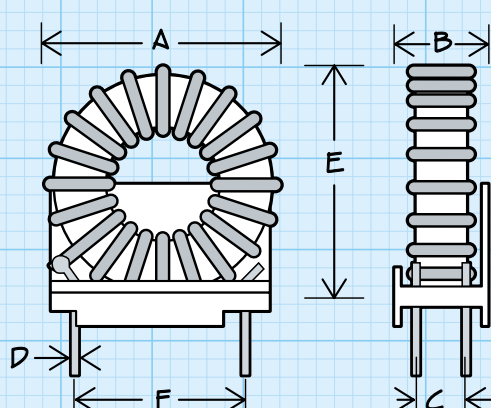
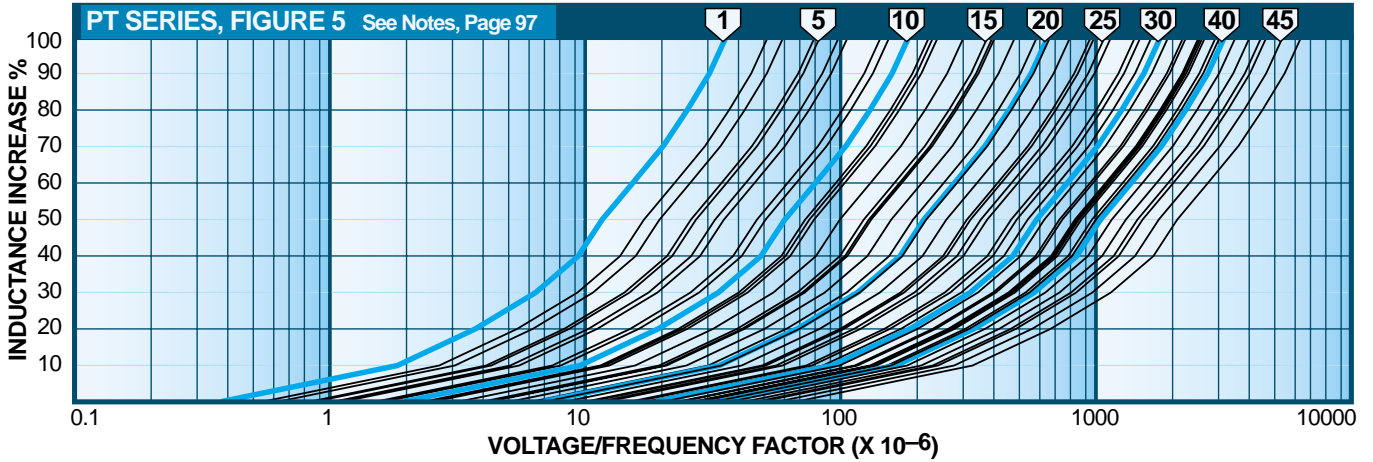


Figure 4: 4-Lead Vertical Base Mount



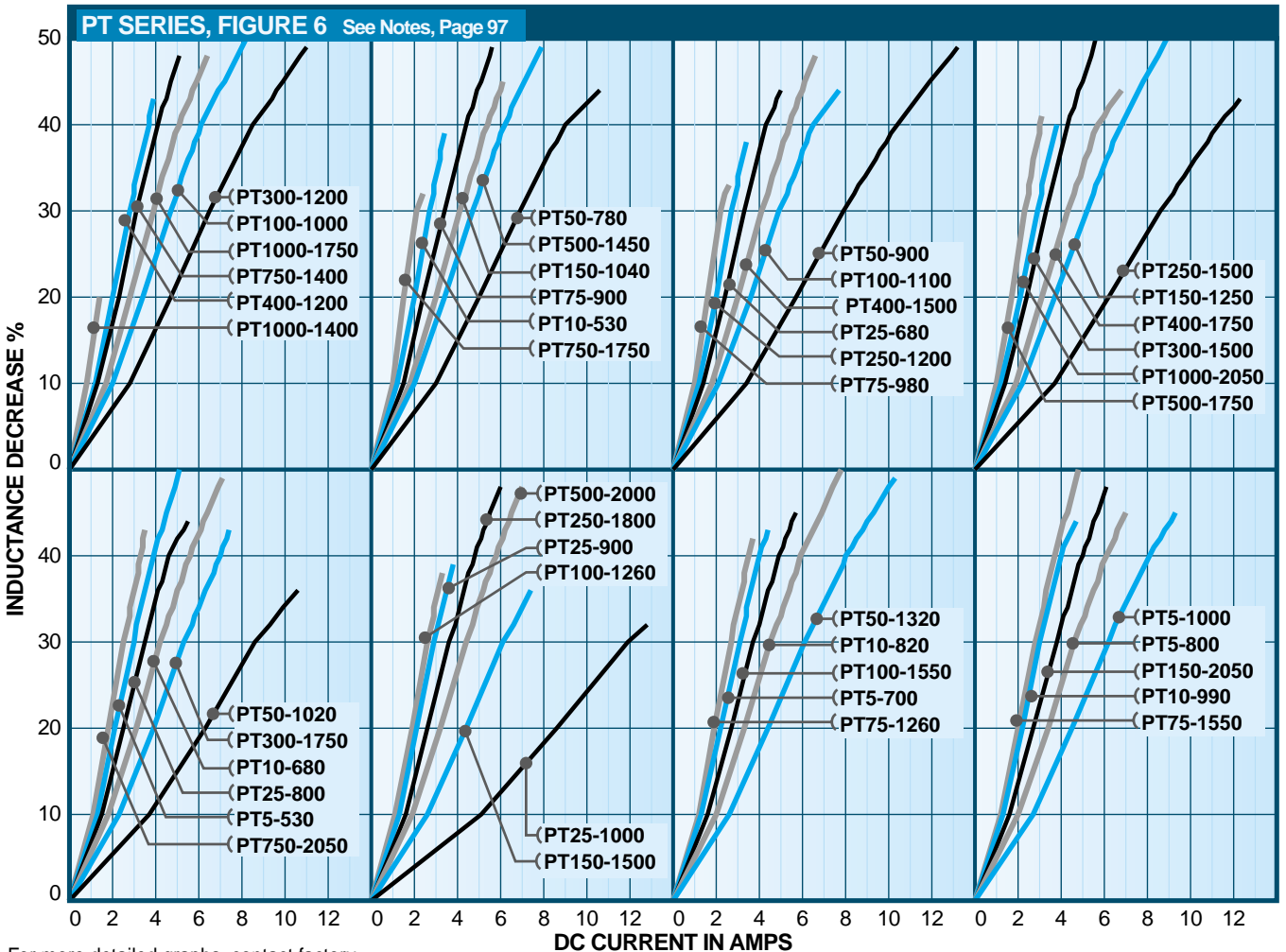
Power Toroids - Horizontal or Vertical Mount

POWER INDUCTORS



KEY TO FIGURE 5 CURVE NUMBERS Graphs apply to all mounting styles. For more detailed graphs, contact factory.

- | | | | | | | | |
|-------------|---------------|----------------|----------------|----------------|----------------|-----------------|-----------------|
| 1) PT5-530 | 7) PT10-820 | 13) PT50-780 | 19) PT100-1100 | 25) PT100-1550 | 31) PT400-1200 | 37) PT500-1450 | 43) PT500-2000 |
| 2) PT10-530 | 8) PT10-990 | 14) PT50-900 | 20) PT50-1320 | 26) PT150-1250 | 32) PT300-1500 | 38) PT400-1750 | 44) PT1000-1750 |
| 3) PT5-700 | 9) PT25-680 | 15) PT75-900 | 21) PT150-1040 | 27) PT150-1500 | 33) PT400-1500 | 39) PT750-1400 | 45) PT750-2050 |
| 4) PT5-800 | 10) PT25-800 | 16) PT75-980 | 22) PT75-1260 | 28) PT250-1200 | 34) PT250-1800 | 40) PT500-1750 | 46) PT1000-2050 |
| 5) PT10-680 | 11) PT25-900 | 17) PT50-1020 | 23) PT100-1260 | 29) PT300-1200 | 35) PT150-2050 | 41) PT1000-1400 | |
| 6) PT5-1000 | 12) PT25-1000 | 18) PT100-1000 | 24) PT75-1550 | 30) PT250-1500 | 36) PT300-1750 | 42) PT750-1750 | |



For more detailed graphs, contact factory

Series PTHFxxxxR & PTKMxxxxR



PTHF & PTKM Traditional First Quality

Toroidal Power Chokes



Horizontal or Vertical Mounting

Excellent electromagnetic shielding

Applications Use Series PTHF for high DC saturation applications; use Series PTKM for low AC core loss applications.

Inductance tested at 1 KHz

DC Resistance at 25°C

Rated Idc based upon 40°C maximum rise from 90°C ambient with 0 Arms

Self Leads Solder coated along entire length

Mounting Toroids can be provided in a vertical or horizontal mount style. Suffix Part Number with "H" for horizontal mount.

dl Incremental Current is the value indicated in the table that will cause an approximate percentage drop in inductance

Marking tape marked with DELEVAN and part number

Physical Parameters on Next Page

***Complete part # must include series # PLUS the dash #**

For further surface finish information, refer to TECHNICAL section of this catalog.

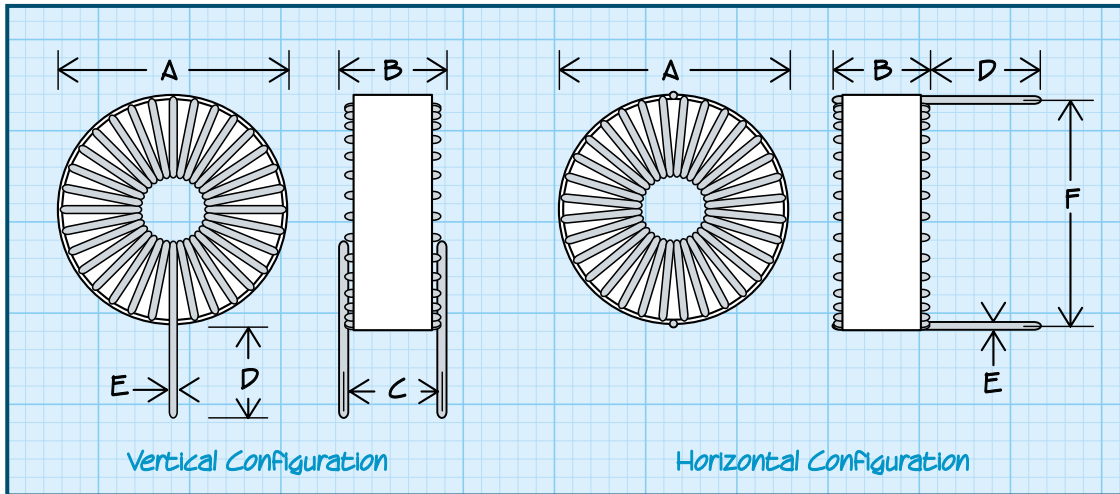
PART NUMBER
 INDUCTANCE (uH) @ 1 KHz ± 10%
 Rated Idc (Amps)
 dl ADC ΔL 10%
 dl ADC ΔL 20%
 DC RESISTANCE MAXIMUM (Ohms)
 SRF MINIMUM (MHZ)

SERIES PTHF HIGH SATURATION CORE						
PTHF10-50	10	7.36	6.0	8.7	0.010	35.0
PTHF25-50	25	5.20	3.6	5.3	0.020	10.0
PTHF50-50	50	3.93	2.0	3.1	0.035	7.0
PTHF75-50	75	3.47	1.6	2.5	0.045	5.0
PTHF100-50	100	3.14	1.5	2.2	0.055	4.0
PTHF150-50	150	2.33	1.2	1.8	0.100	2.0
PTHF200-50	200	1.97	1.0	1.6	0.140	1.7
PTHF250-50	250	1.84	0.9	1.4	0.160	1.5
PTHF330-50	330	1.69	0.8	1.2	0.190	1.0
PTHF10-121	10	8.27	9.0	14.0	0.010	20.0
PTHF25-121	25	6.34	7.0	10.5	0.017	8.0
PTHF50-121	50	4.77	3.9	6.0	0.030	4.0
PTHF75-121	75	3.90	3.9	5.8	0.045	3.0
PTHF100-121	100	3.24	3.4	4.7	0.065	2.0
PTHF150-121	150	2.68	3.3	4.8	0.095	1.5
PTHF250-121	250	2.07	2.2	3.2	0.160	1.0
PTHF10-59	10	14.50	15.0	20.0	0.008	20.0
PTHF25-59	25	9.80	11.0	16.0	0.011	8.0
PTHF50-59	50	6.90	8.3	12.0	0.022	4.0
PTHF75-59	75	5.90	6.7	9.1	0.030	3.0
PTHF100-59	100	4.90	6.5	8.2	0.044	2.0
PTHF150-59	150	4.50	4.2	6.0	0.052	1.0
PTHF250-59	250	3.50	4.0	5.6	0.088	1.0
PTHF500-59	500	2.60	2.7	3.8	0.160	0.8
PTHF750-59	750	2.10	1.8	2.7	0.240	0.6
PTHF25-894	25	12.80	13.5	20.0	0.012	8.0
PTHF50-894	50	9.90	10.8	15.2	0.016	4.0
PTHF75-894	75	8.00	8.0	12.0	0.023	3.0
PTHF100-894	100	8.00	7.1	10.6	0.023	2.0
PTHF150-894	150	6.50	6.0	9.0	0.035	1.0
PTHF250-894	250	5.00	4.6	6.8	0.060	1.0
PTHF500-894	500	3.40	3.1	4.6	0.131	0.8
PTHF750-894	750	3.00	2.7	4.0	0.160	0.6
PTHF1000-894	1000	2.40	2.3	3.5	0.235	0.4
SERIES PTKM FERROUS ALLOY CORE						
PTKM10-50	10	7.36	1.70	3.30	0.010	35.0
PTKM25-50	25	5.20	1.00	1.90	0.020	10.0
PTKM50-50	50	3.93	0.70	1.30	0.035	7.0
PTKM75-50	75	3.47	0.60	1.10	0.045	5.0
PTKM100-50	100	3.14	0.50	0.96	0.055	4.0
PTKM150-50	150	2.33	0.40	0.78	0.100	2.0
PTKM200-50	200	1.97	0.35	0.65	0.140	1.7
PTKM250-50	250	1.84	0.31	0.59	0.160	1.5
PTKM330-50	330	1.69	0.27	0.50	0.190	1.0
PTKM10-121	10	8.27	5.30	9.10	0.010	20.0
PTKM25-121	25	6.34	3.30	5.70	0.017	8.0
PTKM50-121	50	4.77	2.30	4.00	0.030	4.0
PTKM75-121	75	3.90	1.80	3.10	0.045	3.0
PTKM100-121	100	3.24	1.60	2.80	0.065	2.0
PTKM150-121	150	2.68	1.30	2.20	0.095	1.5
PTKM250-121	250	2.07	0.90	1.70	0.160	1.0
PTKM10-59	10	14.50	7.60	13.00	0.008	20.0
PTKM25-59	25	9.80	4.70	8.30	0.011	8.0
PTKM50-59	50	6.90	3.30	5.70	0.022	4.0
PTKM75-59	75	5.90	3.00	4.90	0.030	3.0
PTKM100-59	100	4.90	2.40	4.20	0.044	2.0
PTKM150-59	150	4.50	1.90	3.40	0.052	1.0
PTKM250-59	250	3.50	1.50	2.70	0.088	1.0
PTKM500-59	500	2.60	1.10	1.80	0.160	0.8
PTKM750-59	750	2.10	0.90	1.60	0.240	0.6
PTKM25-894	25	12.80	6.60	11.00	0.012	8.0
PTKM50-894	50	9.90	4.20	7.40	0.016	4.0
PTKM75-894	75	8.00	3.70	6.40	0.023	3.0
PTKM100-894	100	8.00	3.50	6.00	0.023	2.0
PTKM150-894	150	6.50	2.30	4.30	0.035	1.0
PTKM250-894	250	5.00	1.90	3.20	0.060	1.0
PTKM500-894	500	3.40	1.40	2.50	0.131	0.8
PTKM750-894	750	3.00	1.20	2.10	0.160	0.6
PTKM1000-894	1000	2.40	1.00	1.80	0.235	0.4

POWER INDUCTORS

Toroidal Power Chokes – Horizontal or Vertical Mount

POWER INDUCTORS



PHYSICAL PARAMETERS

* **Nominal Dimensions** Allow up to 10% of nominal for maximum size

** **Part Number** Insert HF of KM for complete part number, and suffix "H" for horizontal mounting

Electrical Information on Preceding Page

PART NUMBER	A Nominal*		B Nominal*		C Typical		D Nominal*		E Nominal*		F Nominal*	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
PT**10-50	0.625	15.88	0.300	7.62	0.250	6.35	0.500	12.70	0.036	0.91	0.600	15.24
PT**25-50	0.625	15.88	0.300	7.62	0.250	6.35	0.500	12.70	0.032	0.81	0.600	15.24
PT**50-50	0.625	15.87	0.300	7.62	0.250	6.35	0.500	12.70	0.028	0.71	0.600	15.24
PT**75-50	0.625	15.87	0.300	7.62	0.250	6.35	0.500	12.70	0.025	0.63	0.600	15.24
PT**100-50	0.625	15.87	0.300	7.62	0.250	6.35	0.500	12.70	0.025	0.63	0.600	15.24
PT**150-50	0.625	15.87	0.300	7.62	0.250	6.35	0.500	12.70	0.020	0.51	0.600	15.24
PT**200-50	0.625	15.87	0.300	7.62	0.250	6.35	0.500	12.70	0.018	0.46	0.600	15.24
PT**250-50	0.625	15.87	0.300	7.62	0.250	6.35	0.500	12.70	0.018	0.46	0.600	15.24
PT**330-50	0.625	15.87	0.300	7.62	0.250	6.35	0.500	12.70	0.018	0.46	0.600	15.24
PT**10-121	0.820	20.83	0.400	10.16	0.320	8.13	0.500	12.70	0.040	1.02	0.780	19.81
PT**25-121	0.820	20.83	0.400	10.16	0.320	8.13	0.500	12.70	0.040	1.02	0.780	19.81
PT**50-121	0.820	20.83	0.400	10.16	0.320	8.13	0.500	12.70	0.036	0.91	0.780	19.81
PT**75-121	0.820	20.83	0.400	10.16	0.320	8.13	0.500	12.70	0.032	0.81	0.780	19.81
PT**100-121	0.820	20.83	0.400	10.16	0.320	8.13	0.500	12.70	0.028	0.71	0.780	19.81
PT**150-121	0.850	21.59	0.400	10.16	0.320	8.13	0.500	12.70	0.025	0.63	0.780	19.81
PT**250-121	0.850	21.59	0.400	10.16	0.320	8.13	0.500	12.70	0.023	0.58	0.780	19.81
PT**10-59	1.100	27.94	0.475	12.06	0.370	9.40	0.500	12.70	0.051	1.30	1.050	26.67
PT**25-59	1.100	27.94	0.475	12.06	0.370	9.40	0.500	12.70	0.051	1.30	1.050	26.67
PT**50-59	1.100	27.94	0.475	12.06	0.370	9.40	0.500	12.70	0.045	1.14	1.050	26.67
PT**75-59	1.100	27.94	0.475	12.06	0.370	9.40	0.500	12.70	0.040	1.02	1.050	26.67
PT**100-59	1.100	27.94	0.475	12.06	0.370	9.40	0.500	12.70	0.036	0.91	1.050	26.67
PT**150-59	1.100	27.94	0.475	12.06	0.450	11.43	0.500	12.70	0.036	0.91	1.050	26.67
PT**250-59	1.150	29.21	0.475	12.06	0.450	11.43	0.500	12.70	0.032	0.81	1.050	26.67
PT**500-59	1.150	29.21	0.475	12.06	0.450	11.43	0.500	12.70	0.028	0.71	1.050	26.67
PT**750-59	1.150	29.21	0.475	12.06	0.450	11.43	0.500	12.70	0.025	0.63	1.050	26.67
PT**25-894	1.300	33.02	0.650	16.51	0.600	15.24	0.750	19.05	0.051	1.30	1.250	31.75
PT**50-894	1.300	33.02	0.650	16.51	0.600	15.24	0.750	19.05	0.051	1.30	1.250	31.75
PT**75-894	1.300	33.02	0.650	16.51	0.600	15.24	0.750	19.05	0.051	1.30	1.250	31.75
PT**100-894	1.300	33.02	0.650	16.51	0.600	15.24	0.750	19.05	0.051	1.30	1.250	31.75
PT**150-894	1.300	33.02	0.650	16.51	0.600	15.24	0.750	19.05	0.045	1.14	1.250	31.75
PT**250-894	1.300	33.02	0.650	16.51	0.600	15.24	0.750	19.05	0.040	1.02	1.250	31.75
PT**500-894	1.300	33.02	0.650	16.51	0.600	15.24	0.750	19.05	0.032	0.81	1.250	31.75
PT**750-894	1.300	33.02	0.650	16.51	0.600	15.24	0.750	19.05	0.032	0.81	1.250	31.75
PT**1000-894	1.300	33.02	0.650	16.51	0.600	15.24	0.750	19.05	0.028	0.71	1.250	31.75

Series PTHFxxxxR-VM & PTKMxxxxR-VM

PTHF-VM & PTKM-VM

Vertical Toroidal Power Chokes

Traditional First Quality

RoHS Compliant



- Excellent electromagnetic shielding performance for commercial and industrial applications
- Cost-effective design
- For higher saturation levels use Series PTHF-VM
- Current rating from 1.69 to 14.5 amps
- Inductance values from 10 μ H to 1000 μ H

Physical Parameters on Next Page

Notes

- 1) Rated current is based on a 35°C temperature rise at an ambient temperature of 90°C.
- 2) Incremental current is the approximate value that will cause a percentage drop in inductance as indicated in the table.

***Complete part # must include series # PLUS the dash #**

For further surface finish information, refer to TECHNICAL section of this catalog.

PART NUMBER*

INDUCTANCE (μ H)
@ 1 kHz \pm 10%

RATED Idc (Amps)

Inc-I ADC
 Δ L 10%

Inc-I ADC
 Δ L 20%

DC RESISTANCE
MAXIMUM (Ohms)

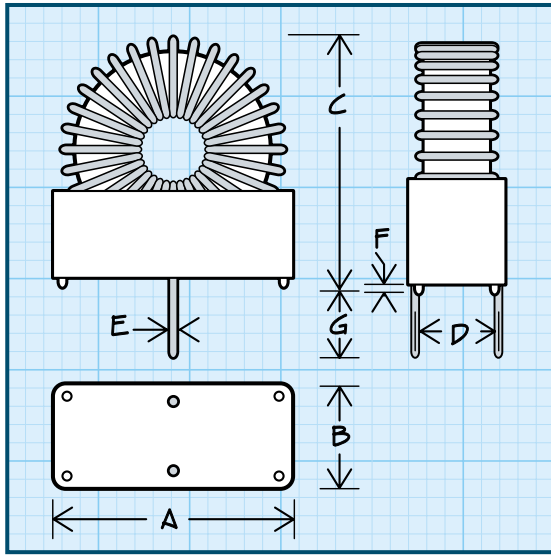
SRF MINIMUM (MHz)

	SERIES PTHF-VM HIGH SATURATION CORE					
PTHF10-50VM	10	7.36	6.00	8.70	0.010	35.0
PTHF25-50VM	25	5.20	3.60	5.30	0.020	10.0
PTHF50-50VM	50	3.93	2.00	3.10	0.035	4.0
PTHF75-50VM	75	3.47	1.60	2.50	0.045	3.5
PTHF100-50VM	100	3.14	1.50	2.20	0.055	2.5
PTHF150-50VM	150	2.33	1.20	1.80	0.100	1.5
PTHF200-50VM	200	1.97	1.00	1.60	0.140	1.3
PTHF250-50VM	250	1.84	0.90	1.40	0.160	1.0
PTHF330-50VM	330	1.69	0.80	1.20	0.190	0.8
PTHF10-121VM	10	8.27	9.00	14.00	0.010	20.0
PTHF25-121VM	25	6.34	7.00	10.50	0.017	6.5
PTHF50-121VM	50	4.77	3.90	6.00	0.030	3.5
PTHF75-121VM	75	3.90	3.90	5.80	0.045	2.5
PTHF100-121VM	100	3.24	3.40	4.70	0.065	2.0
PTHF150-121VM	150	2.68	3.30	4.80	0.095	1.5
PTHF250-121VM	250	2.07	2.20	3.20	0.160	1.0
PTHF10-59VM	10	14.50	15.00	20.00	0.008	10.0
PTHF25-59VM	25	9.80	11.00	16.00	0.011	8.0
PTHF50-59VM	50	6.90	8.30	12.00	0.022	3.5
PTHF75-59VM	75	5.90	6.70	9.10	0.030	2.5
PTHF100-59VM	100	4.90	6.50	8.20	0.044	2.0
PTHF150-59VM	150	4.50	4.20	6.00	0.052	1.0
PTHF250-59VM	250	3.50	4.00	5.60	0.088	0.9
PTHF500-59VM	500	2.60	2.70	3.80	0.160	0.7
PTHF750-59VM	750	2.10	1.80	2.70	0.240	0.5
PTHF25-894VM	25	12.80	13.50	20.00	0.012	8.0
PTHF50-894VM	50	9.90	10.80	15.20	0.016	4.0
PTHF75-894VM	75	8.00	8.00	12.00	0.023	2.5
PTHF100-894VM	100	8.00	7.10	10.60	0.023	2.0
PTHF150-894VM	150	6.50	6.00	9.00	0.035	1.0
PTHF250-894VM	250	5.00	4.60	6.80	0.060	0.9
PTHF500-894VM	500	3.40	3.10	4.60	0.131	0.7
PTHF750-894VM	750	3.00	2.70	4.00	0.160	0.6
PTHF1000-894VM	1000	2.40	2.30	3.50	0.235	0.4
	SERIES PTKM-VM FERROUS ALLOY CORE					
PTKM10-50VM	10	7.36	1.70	3.30	0.010	35.0
PTKM25-50VM	25	5.20	1.00	1.90	0.020	10.0
PTKM50-50VM	50	3.93	0.70	1.30	0.035	4.0
PTKM75-50VM	75	3.47	0.60	1.10	0.045	3.5
PTKM100-50VM	100	3.14	0.50	0.96	0.055	2.5
PTKM150-50VM	150	2.33	0.40	0.78	0.100	1.5
PTKM200-50VM	200	1.97	0.35	0.65	0.140	1.3
PTKM250-50VM	250	1.84	0.31	0.59	0.160	1.0
PTKM330-50VM	330	1.69	0.27	0.50	0.190	0.8
PTKM10-121VM	10	8.27	5.30	9.10	0.010	20.0
PTKM25-121VM	25	6.34	3.30	5.70	0.017	6.5
PTKM50-121VM	50	4.77	2.30	4.00	0.030	3.5
PTKM75-121VM	75	3.90	1.80	3.10	0.045	2.5
PTKM100-121VM	100	3.24	1.60	2.80	0.065	2.0
PTKM150-121VM	150	2.68	1.30	2.20	0.095	1.5
PTKM250-121VM	250	2.07	0.90	1.70	0.160	1.0
PTKM10-59VM	10	14.50	7.60	13.00	0.008	10.0
PTKM25-59VM	25	9.80	4.70	8.30	0.011	8.0
PTKM50-59VM	50	6.90	3.30	5.70	0.022	3.5
PTKM75-59VM	75	5.90	3.00	4.90	0.030	2.5
PTKM100-59VM	100	4.90	2.40	4.20	0.044	2.0
PTKM150-59VM	150	4.50	1.90	3.40	0.052	1.0
PTKM250-59VM	250	3.50	1.50	2.70	0.088	0.9
PTKM500-59VM	500	2.60	1.10	1.80	0.160	0.7
PTKM750-59VM	750	2.10	0.90	1.60	0.240	0.5
PTKM25-894VM	25	12.80	6.60	11.00	0.012	8.0
PTKM50-894VM	50	9.90	4.20	7.40	0.016	4.0
PTKM75-894VM	75	8.00	3.70	6.40	0.023	2.5
PTKM100-894VM	100	8.00	3.50	6.00	0.023	2.0
PTKM150-894VM	150	6.50	2.30	4.30	0.035	1.0
PTKM250-894VM	250	5.00	1.90	3.20	0.060	0.9
PTKM500-894VM	500	3.40	1.40	2.50	0.131	0.7
PTKM750-894VM	750	3.00	1.20	2.10	0.160	0.6
PTKM1000-894VM	1000	2.40	1.00	1.80	0.235	0.4

POWER INDUCTORS

Vertical Toroidal Power Chokes

POWER INDUCTORS



Physical Parameters

	Inches	Millimeters
F (Standoffs)	0.025	0.635
G (Lead length below standoff)	0.250 ± 0.062	6.35 ± 1.57

Other dimensions in table below

Electrical Information on Preceding Page

PART NUMBER*	A Nom.		B Nom.		C Nom.		D Nom.		E Nom.	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
PT**10-50VM	0.750	19.05	0.400	10.16	0.775	19.68	0.250	6.350	0.036	0.914
PT**25-50VM	0.750	19.05	0.400	10.16	0.775	19.68	0.250	6.350	0.032	0.813
PT**50-50VM	0.750	19.05	0.400	10.16	0.775	19.68	0.250	6.350	0.028	0.711
PT**75-50VM	0.750	19.05	0.400	10.16	0.775	19.68	0.250	6.350	0.025	0.635
PT**100-50VM	0.750	19.05	0.400	10.16	0.775	19.68	0.250	6.350	0.025	0.635
PT**150-50VM	0.750	19.05	0.400	10.16	0.775	19.68	0.250	6.350	0.020	0.508
PT**200-50VM	0.750	19.05	0.400	10.16	0.775	19.68	0.250	6.350	0.018	0.457
PT**250-50VM	0.750	19.05	0.400	10.16	0.775	19.68	0.250	6.350	0.018	0.457
PT**330-50VM	0.750	19.05	0.400	10.16	0.775	19.68	0.250	6.350	0.018	0.457
PT**10-121VM	0.800	20.32	0.500	12.70	0.950	24.13	0.350	8.890	0.040	1.016
PT**25-121VM	0.800	20.32	0.500	12.70	0.950	24.13	0.350	8.890	0.040	1.016
PT**50-121VM	0.800	20.32	0.500	12.70	0.950	24.13	0.350	8.890	0.036	0.914
PT**75-121VM	0.800	20.32	0.500	12.70	0.950	24.13	0.350	8.890	0.032	0.813
PT**100-121VM	0.800	20.32	0.500	12.70	0.975	24.76	0.350	8.890	0.028	0.711
PT**150-121VM	0.800	20.32	0.500	12.70	0.975	24.76	0.350	8.890	0.025	0.635
PT**250-121VM	0.800	20.32	0.500	12.70	0.975	24.76	0.350	8.890	0.023	0.584
PT**10-59VM	1.210	30.73	0.685	17.40	1.175	29.84	0.400	10.16	0.051	1.295
PT**25-59VM	1.210	30.73	0.685	17.40	1.175	29.84	0.400	10.16	0.051	1.295
PT**50-59VM	1.210	30.73	0.685	17.40	1.175	29.84	0.400	10.16	0.045	1.143
PT**75-59VM	1.210	30.73	0.685	17.40	1.175	29.84	0.400	10.16	0.040	1.016
PT**100-59VM	1.210	30.73	0.685	17.40	1.175	29.84	0.400	10.16	0.036	0.914
PT**150-59VM	1.210	30.73	0.685	17.40	1.175	29.84	0.400	10.16	0.036	0.914
PT**250-59VM	1.210	30.73	0.685	17.40	1.250	31.75	0.400	10.16	0.032	0.813
PT**500-59VM	1.210	30.73	0.685	17.40	1.250	31.75	0.400	10.16	0.028	0.711
PT**750-59VM	1.210	30.73	0.685	17.40	1.250	31.75	0.400	10.16	0.025	0.635
PT**25-894VM	1.450	36.83	0.825	20.95	1.400	35.56	0.600	15.24	0.051	1.295
PT**50-894VM	1.450	36.83	0.825	20.95	1.400	35.56	0.600	15.24	0.051	1.295
PT**75-894VM	1.450	36.83	0.825	20.95	1.400	35.56	0.600	15.24	0.051	1.295
PT**100-894VM	1.450	36.83	0.825	20.95	1.400	35.56	0.600	15.24	0.051	1.295
PT**150-894VM	1.450	36.83	0.825	20.95	1.400	35.56	0.600	15.24	0.045	1.143
PT**250-894VM	1.450	36.83	0.825	20.95	1.400	35.56	0.600	15.24	0.040	1.016
PT**500-894VM	1.450	36.83	0.825	20.95	1.475	37.46	0.600	15.24	0.032	0.813
PT**750-894VM	1.450	36.83	0.825	20.95	1.475	37.46	0.600	15.24	0.032	0.813
PT**1000-894VM	1.450	36.83	0.825	20.95	1.475	37.46	0.600	15.24	0.028	0.711

** Insert HF or KM for complete Part Number

*Complete part # must include series # PLUS the dash #

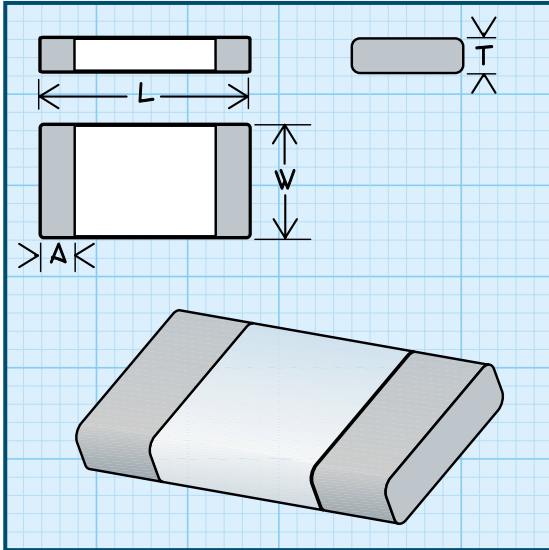
For further surface finish information, refer to TECHNICAL section of this catalog.

Series

EMI0603R, EMI0805R, EMI1206R,
EMI1210R, EMI1806R, EMI1812R



EMI0603, EMI0805, EMI1206,
EMI1210, EMI1806, EMI1812



Small size utilizing a monolithic ferrite structure which results in excellent magnetic shielding.

Operating Temperature Range -55°C to +125°C

Terminations Suitable for flow & reflow soldering application.

Current Rating The current at which the Impedance will change by a maximum of ±25%.

Note † Test Frequency for EMI1206-1500 = 50 MHz

*** Test Frequency for EMI1206-2000 = 30 MHz

Additional values available -
contact factory for your application

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to
TECHNICAL section of this catalog.

DASH NUMBER*

IMPEDANCE @ 100 MHz
(OHMS) ±25%

DC RESISTANCE
(OHMS) Max

CURRENT RATING
MAXIMUM (mA)

SERIES EMI0603			
-60	60	0.10	600
-68	68	0.10	600
-80	80	0.10	400
-120	120	0.15	400
-220	220	0.30	300
-300	300	0.35	300
-450	450	0.40	300
-600	600	0.45	200
-750	750	0.60	100
-1000	1000	0.60	100

SERIES EMI0805			
-11	11	0.05	600
-40	40	0.05	600
-90	90	0.10	600
-120	120	0.15	500
-150	150	0.15	500
-220	220	0.22	500
-300	300	0.20	500
-400	400	0.30	500
-600	600	0.30	500
-1000	1000	0.35	300
-1500	1500	0.40	200
-2000	2000	0.50	200

SERIES EMI1206			
-31	31	0.05	600
-50	50	0.10	600
-70	70	0.10	600
-90	90	0.15	500
-120	120	0.15	500
-150	150	0.15	500
-200	200	0.20	500
-300	300	0.20	500
-600	600	0.30	500
-800	800	0.30	200
-1000	1000	0.40	200
-1200	1200	0.40	200
-1500†	1500	0.50	200
-2000***	2000	0.50	200

SERIES EMI1210			
-60	60	0.30	400

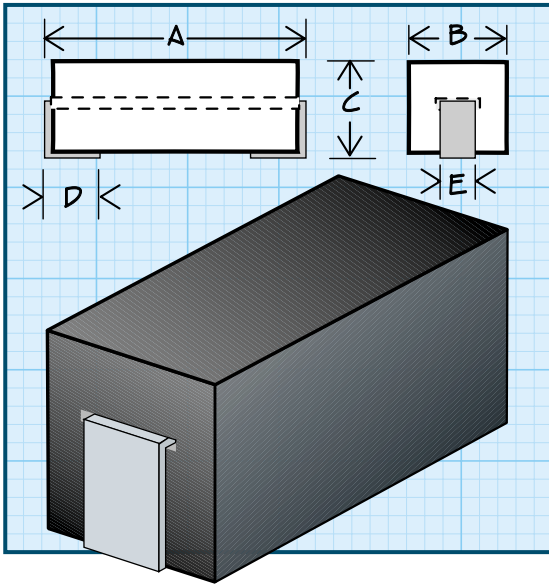
SERIES EMI1806			
-80	80	0.10	400
-105	100	0.20	300
-150	150	0.30	200

SERIES EMI1812			
-125	120	0.40	200

SUPPRESSORS

Physical Parameters and Packaging						
	EMI0603	EMI0805	EMI1206	EMI1210	EMI1806	EMI1812
Dimensions						
L - inches	0.063±0.006	0.079±0.008	0.126±0.008	0.126±0.008	0.177±0.010	0.177±0.010
(mm)	(1.6±0.15)	(2.0±0.2)	(3.2±0.2)	(3.2±0.2)	(4.5±0.25)	(4.5±0.25)
W - inches	0.031±0.006	0.049±0.008	0.063±0.008	0.098±0.008	0.063±0.008	0.126±0.010
(mm)	(0.8±0.15)	(1.25±0.2)	(1.6±0.2)	(2.5±0.2)	(1.6±0.2)	(3.2±0.25)
T - inches	0.031±0.006	0.035±0.008	0.043±0.008	0.051±0.008	0.063±0.008	0.059±0.010
(mm)	(0.8±0.15)	(0.9±0.2)	(1.1±0.2)	(1.3±0.2)	(1.6±0.2)	(1.5±0.25)
A - inches	0.012±0.008	0.020±0.012	0.020±0.012	0.020±0.012	0.022±0.016	0.022±0.016
(mm)	(0.3±0.20)	(0.50±0.300)	(0.50±0.300)	(0.50±0.300)	(0.60±0.400)	(0.60±0.400)
Packaging Tape & reel (12mm); max. pieces per reel as follows						
	4000	4000	3000	2000	2000	1000

Surface Mount Filter Bead



Dash Number*	Impedance (OHMS)	
	@ 25MHz (Min.)	@ 100MHz (±20%)
-1	22	47
-2	45	95
-3	22	42
-4	43	85

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Operating Temperature Range -55°C to +125°C

Current Rating 5 Amps max. (35°C Rise, 90° Ambient)

Material Ferrite bead with plated copper lead

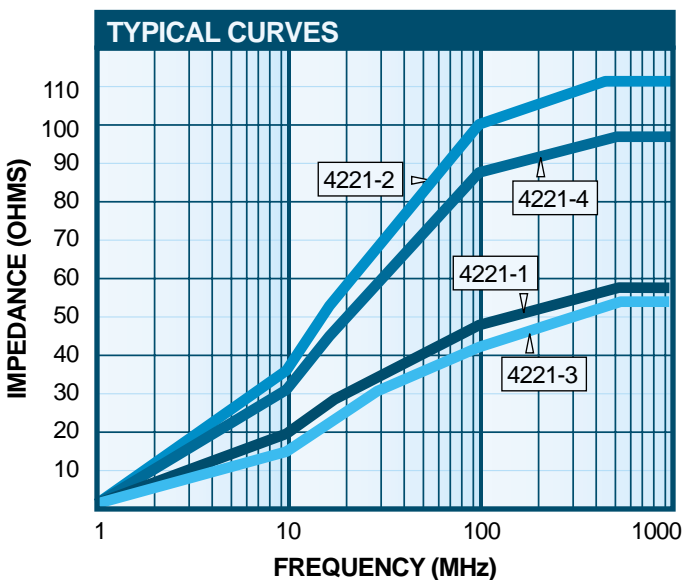
Packaging Tape & reel

Series 4221-1 and 4221-3 (12mm)

Series 4221-2 and 4221-4 (16mm)

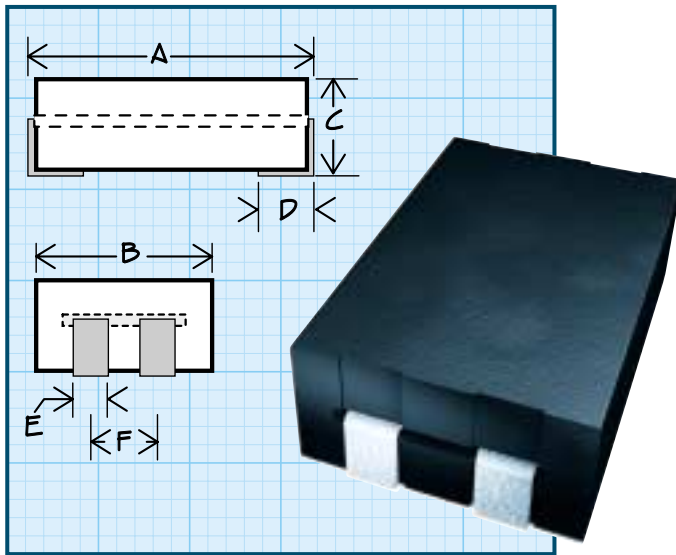
7" reel, 500 pieces max.; 13" reel, 4000 pieces max.

	4221 - 1	4221 - 2	4221 - 3	4221 - 4
A in.	0.197 +0.011/-0.028	0.374 +0.015/-0.028	0.217 +0.011/-0.028	0.350 +0.015/-0.028
mm.	(5.0 +0.3/-0.7)	(9.5 +0.4/-0.7)	(5.5 +0.3/-0.7)	(8.9 +0.4/-0.7)
B in.	0.120 ± 0.006	0.120 ± 0.006	0.117 ± 0.006	0.187 ± 0.006
mm.	(3.05 ± 0.15)	(3.05 ± 0.15)	(2.97 ± 0.15)	(4.75 ± 0.15)
C in.	0.120 +0.007/-0.015	0.120 +0.007/-0.015	0.138 +0.007/-0.015	0.138 +0.007/-0.015
mm.	(3.05 +0.2/-0.4)	(3.05 +0.2/-0.4)	(3.50 +0.2/-0.4)	(3.50 +0.2/-0.4)
D in.	0.059 ± 0.025	0.059 ± 0.025	0.059 ± 0.025	0.059 ± 0.025
mm.	(1.50 ± 0.63)	(1.50 ± 0.63)	(1.50 ± 0.63)	(1.50 ± 0.63)
E in.	0.050 ± 0.003	0.050 ± 0.003	0.050 ± 0.003	0.073 ± 0.003
mm.	(1.25 ± 0.07)	(1.25 ± 0.07)	(1.25 ± 0.07)	(1.85 ± 0.07)



For more detailed graphs, contact factory

Surface Mount Common Mode Bead



Mechanical Configuration Ferrite bead with plated copper wire. Provides a common path for the magnetic flux generated by the current to and from the load. The resulting effect is zero magnetic flux in the core.

Physical Parameters

	Inches	Millimeters
A	0.335 ± 0.031	8.51 ± 0.79
B	0.220 ± 0.010	5.6 ± 0.25
C	0.112 ± 0.010	2.85 ± 0.25
D	0.050 ± 0.010	1.27 ± 0.25
E	0.045 ± 0.005	1.10 ± 0.122
F (Ref.)	0.10	2.54
V (Ref.)	0.177	4.5
W (Ref.)	0.295	7.5
X (Ref.)	0.071	1.8
Y (Ref.)	0.118	3.0
Z (Ref.)	0.100	2.54

Packaging Tape & reel (16mm): 7" reel, 500 pieces max.; 13" reel, 2400 pieces max.

Performance Withstands a breakdown voltage of 500 VDC

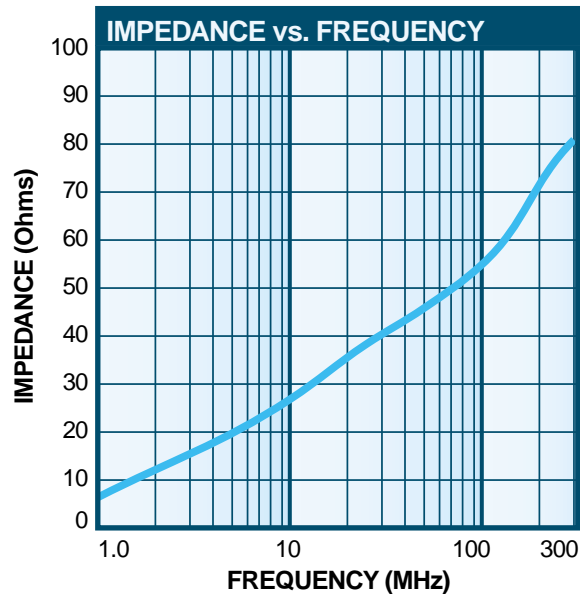
DCR 0.010 Ohms Max.

Current Rating at 90°C Ambient
35°C Rise, 5 Amps max.

Impedances are measured on the HP4191A Impedance Analyzer

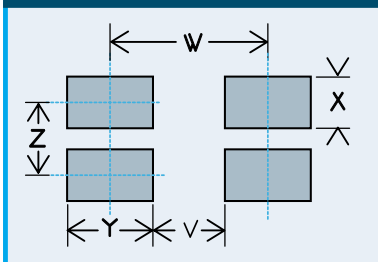
Impedance vs. Frequency (Typical)

@ MHz	Ohms
1	6.0
10	26.
25	38.
50	45.
100	54.
300	80.



For more detailed graphs, contact factory

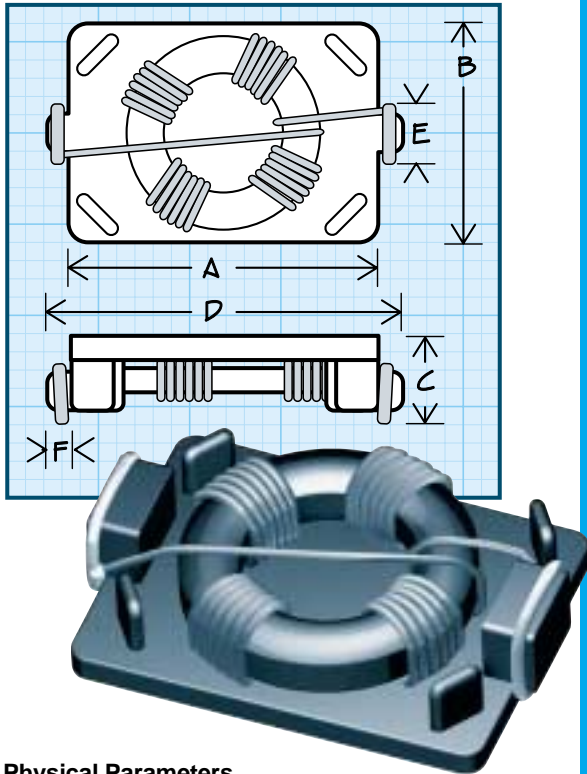
LAND PATTERN DIMENSIONS



Series 8454R 8454



Surface Mount EMI/RFI Filter Chokes



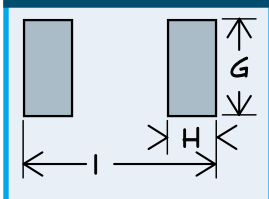
Physical Parameters

	Inches	Millimeters
A	0.260 to 0.276	6.6 to 7.0
B	0.205 to 0.228	5.2 to 5.8
C	0.071 to 0.083	1.8 to 2.1
D	0.323 to 0.339	8.2 to 8.6
E	0.091 Max.	2.3 Max.
F	0.026 to 0.037	0.65 to 0.95
G	0.102	2.6
H	0.051	1.3
I	0.363	8.8

Operating Temperature Range
-55°C to +125°C

Packaging Tape & reel (8mm):
7" reel, 1000 pieces max.;
13" reel, 4000 pieces max.

LAND PATTERN DIMENSIONS



DASH NUMBER*	VOLTAGE RATING (V)	CURRENT RATING MAXIMUM (mAmps)	INDUCTANCE (µH) ± 50%	DC RESISTANCE MAXIMUM (M OHMS)	INSULATION VOLTAGE (VDC) **	IMPEDANCE MINIMUM	
						25 MHz	100 MHz

-1	50	500	1.0	25	200	45	60
-1R5	50	500	1.5	60	200	80	870
-2	50	500	2.0	100	200	270	1065
-11	50	500	11	55	200	400	400
-82	50	500	82	80	200	1200	600

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

API Delevan's combination of high performance Ni-Zn cores and low capacitance type windings allow for superior frequency characteristics.

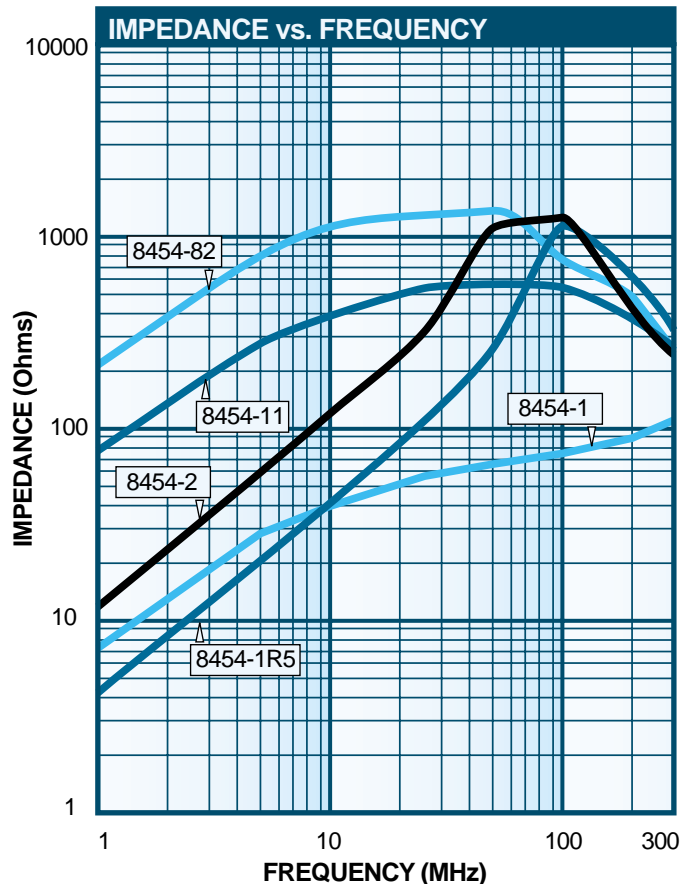
- Only small scattered fields are generated by the windings
- Ensures excellent attenuation characteristics over a wide frequency range
- Packaged in a flat-top (UL94V-O) header, compatible with auto insertion equipment

Typical Applications Data line filters; audio signal filters; current supply choke; video signal filters.

- Sample kit available

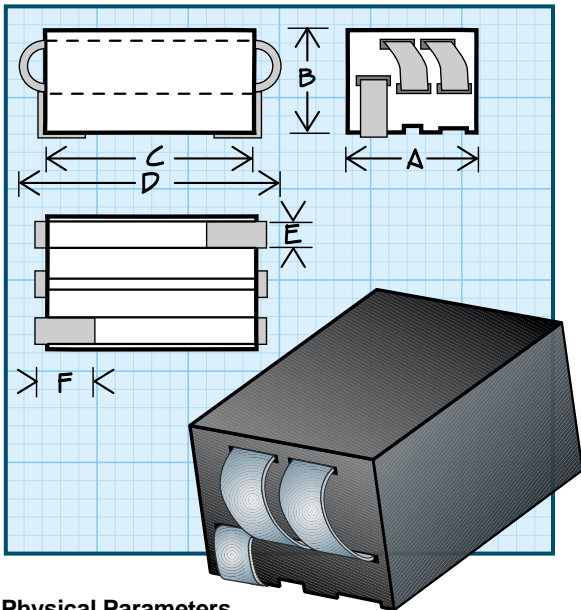
Notes

- ** 1. Insulation Voltage (VDC) is one minute line to case; inductance measured at 1kHz/1V
2. Impedance measurement using HP4191A impedance analyzer.



For more detailed graphs, contact factory

Surface Mount Shield Beads



Physical Parameters

	Inches	Millimeters
A	0.285 ± 0.010	7.2 ± 0.25
B	0.185 ± 0.015	4.7 ± 0.38
C	0.355 ± 0.020	9.02 ± 0.51
D	0.460 Max.	11.68 Max.
E	0.050 ± 0.005	1.27 ± 0.13
F	0.075 Min.	1.9 Min.

Operating Temperature Range -40°C to +125°C

Impedances are measured on the HP 4291A Impedance Analyzer

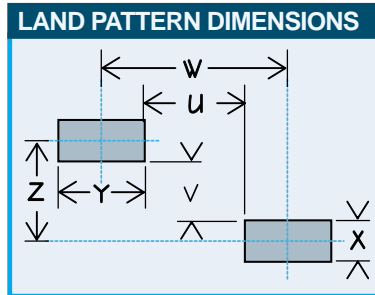
Material High resistivity ferrite material eliminates the need to insulate windings

Lead Wire Plated copper

Idc Max. Based on a 35° C rise from 90°C ambient

Parts are available in tape and reel packaging

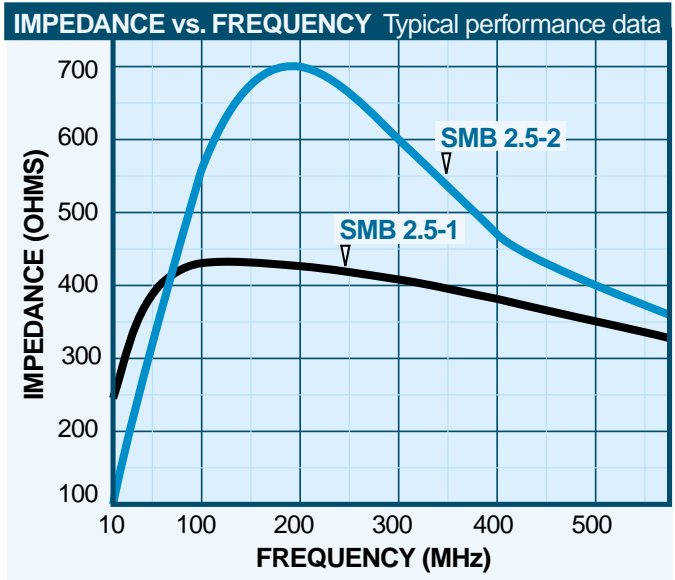
Packaging Tape & reel (24mm): 13" reel, 700 pieces max.; 7" reel not available



Suggested

Land Pattern Dimensions

	Inches	Millimeters
U	0.075	1.9
V	0.095	2.4
W	0.265	6.7
X	0.09	2.3
Y	0.19	4.8
Z	0.185	4.7



For more detailed graphs, contact factory

Dash Number*	Turns	Minimum Impedance (Ohms)				Idc Max. (Amps)	DCR Max. (Ohms)
		10 MHz	100 MHz	150 MHz	220 MHz		
-1	2½	210	385	400	375	9.5	0.005
-2	2½	NA	490	635	650	9.5	0.005

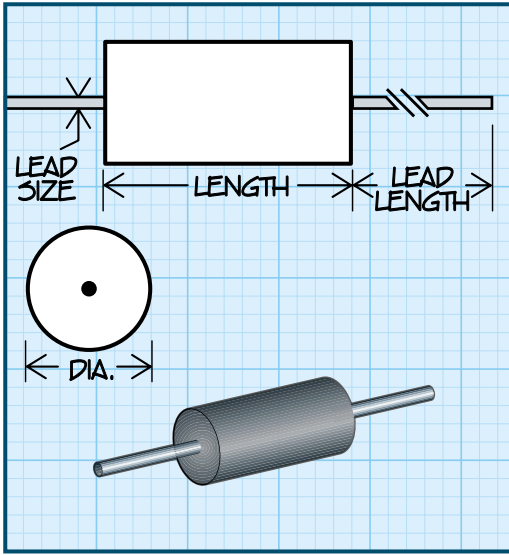
*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Series 4211R 4211



Axial Leaded Filter Bead



Impedance measured at indicated frequencies, utilizing an HP 4191A at 25°C

Lead Material capable of meeting MIL-STD-202, Method 208 solderability requirements

Marking Individual part marking is not available

Packaging Tape & reel: 14" reel. Series 4211-1 to 4211-8 and 4211-12 to 4211-30, 4000 pieces max. Series 4211-9 to 4211-11, 1000 pieces max. 12" reel not available

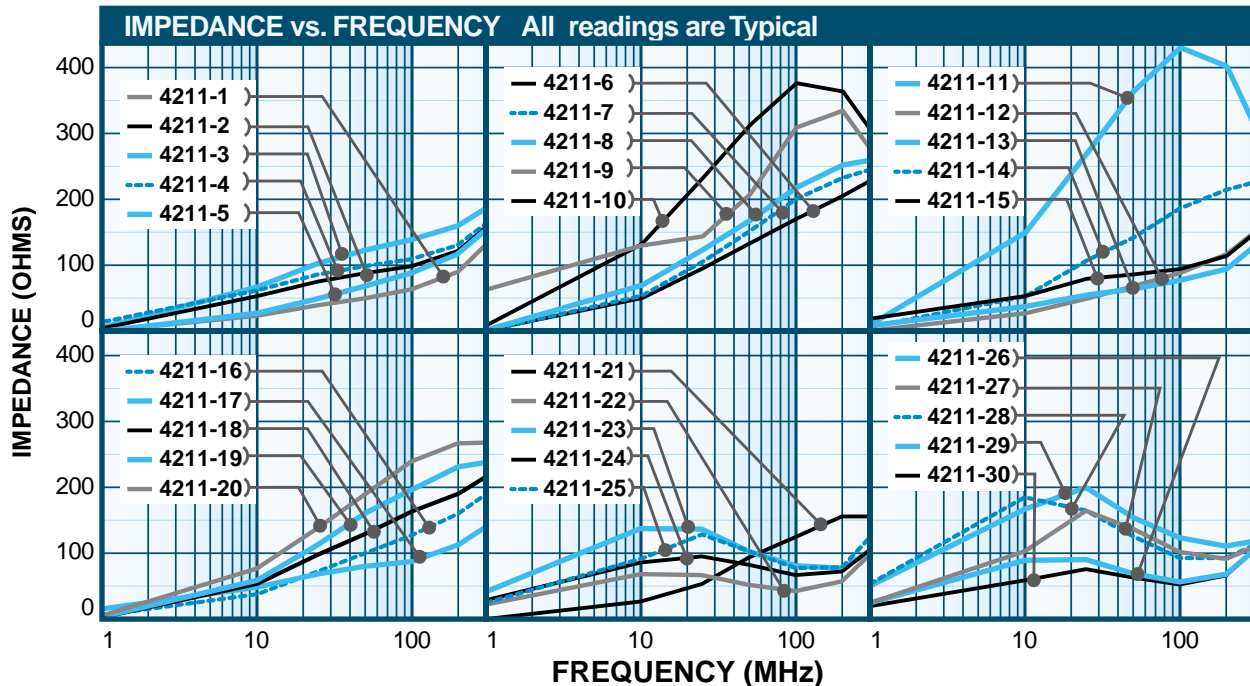
DIMENSIONS (Inches)
DASH NUMBER*
DIAMETER ±.010
LEAD SIZE ±.002
LENGTH
TOLERANCE
10 MHz
25 MHz
100 MHz
250 MHz

FERRITE CORE								
DASH NUMBER*	DIAMETER ±.010	LEAD SIZE ±.002	LENGTH	TOLERANCE	10 MHz	25 MHz	100 MHz	250 MHz
-1	0.138	0.025	0.175	±.010	39		54 - 82	
-2	0.138	0.025	0.350	±.020	70		106 - 160	
-3	0.138	0.025	0.263	±.010	52		80 - 120	
-4	0.138	0.025	0.300	±.020	60		88 - 132	
-5	0.138	0.025	0.236	±.010	48		72 - 109	
-6	0.138	0.025	0.375	±.010	77		120 - 180	
-7	0.138	0.025	0.450	±.015	93		144 - 216	
-8	0.138	0.025	0.545	±.025	114		176 - 264	
-9	0.385	0.032	0.450	±.015	154		216 - 325	
-10	0.385	0.032	0.550	±.020	188		264 - 397	
-11	0.385	0.032	0.650	±.020	224		312 - 469	
-12	0.138	0.025	0.206	±.010	43		66 - 98	
-13	0.138	0.025	0.175	±.010			50 min.	72 - 108
-14	0.138	0.025	0.350	±.020			105 min.	134 - 202
-15	0.138	0.025	0.263	±.010			78 min.	100 - 150
-16	0.138	0.025	0.300	±.020			90 min.	115 - 173
-17	0.138	0.025	0.236	±.010			70 min.	90 - 136
-18	0.138	0.025	0.375	±.010			112 min.	144 - 216
-19	0.138	0.025	0.450	±.015			135 min.	170 - 255
-20	0.138	0.025	0.545	±.025			163 min.	206 - 310
-21	0.138	0.025	0.206	±.010			61 min.	80 - 120
-22	0.138	0.025	0.175	±.010	38	49-73		
-23	0.138	0.025	0.350	±.020	75	92-138		
-24	0.138	0.025	0.263	±.010	56	69-103		
-25	0.138	0.025	0.300	±.020	64	79-118		
-26	0.138	0.025	0.236	±.010	50	62-93		
-27	0.138	0.025	0.375	±.025	88	108-162		
-28	0.138	0.025	0.450	±.015	100	124-187		
-29	0.138	0.025	0.545	±.025	121	152-228		
-30	0.138	0.025	0.206	±.010	44	54-82		

*Complete part # must include series # PLUS the dash #
For further surface finish information, refer to TECHNICAL section of this catalog.

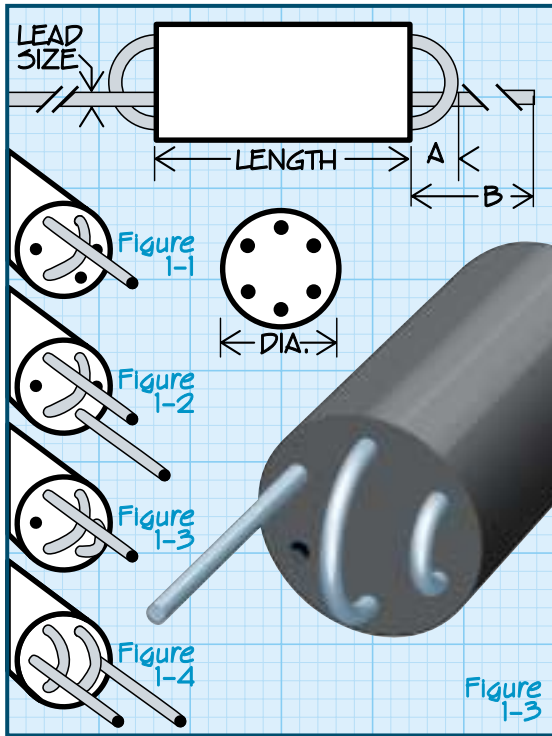
Lead Length 1 Inch min.

SUPPRESSORS



For more detailed graphs, contact factory

Wound Beads



DASH NUMBER*	FIGURE	# OF TURNS	MINIMUM IMPEDANCE					
			@ 10 MHz	@ 50 MHz	@ 100 MHz	@ 150 MHz	@ 200 MHz	@ 220 MHz
-1	1-3	2½	—	—	750	700	—	400
-2	1-3	2½	325	—	575	525	—	—
-3	1-1	1½	—	325	425	—	400	—
-4	1-1	1½	170	320	375	—	—	—
-5	1-2	2	—	525	600	—	600	—
-6	1-2	2	240	520	480	—	—	—
-7	1-4	3	—	950	900	—	600	—
-8	1-4	3	400	800	550	—	—	—

*Complete part # must include series # PLUS the dash #
For further surface finish information, refer to TECHNICAL section of this catalog.

Physical Parameters

	Inches	Millimeters
Length	0.374 to 0.414	9.50 to 10.51
Diameter	0.216 to 0.256	5.48 to 6.35
Lead Size		
AWG #24 TCW	0.0185 to 0.0215	0.47 to 0.55
A	0.12 Max.	3.05 Max.
B	1.10 Min.	28.0 Min.

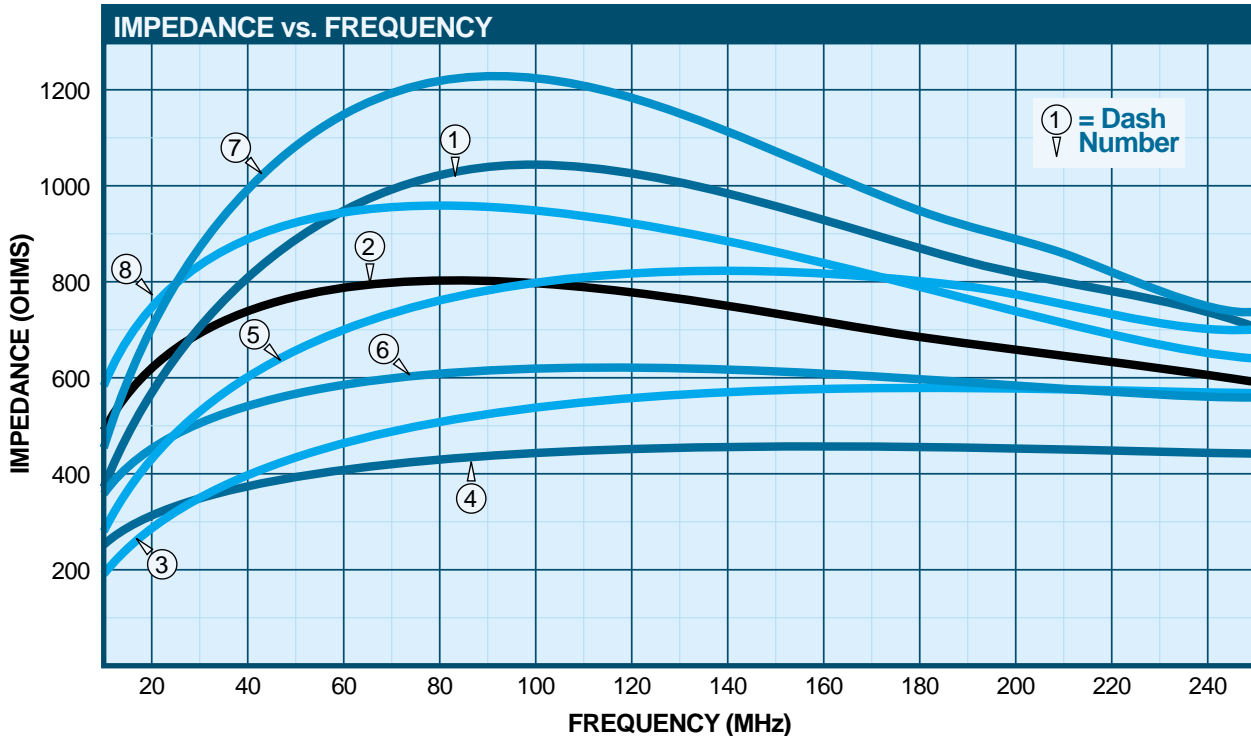
Impedances measured on HP 4191A Impedance Analyzer.

High resistivity ferrite material eliminates the need to insulate windings.

Lead Wire Plated copper

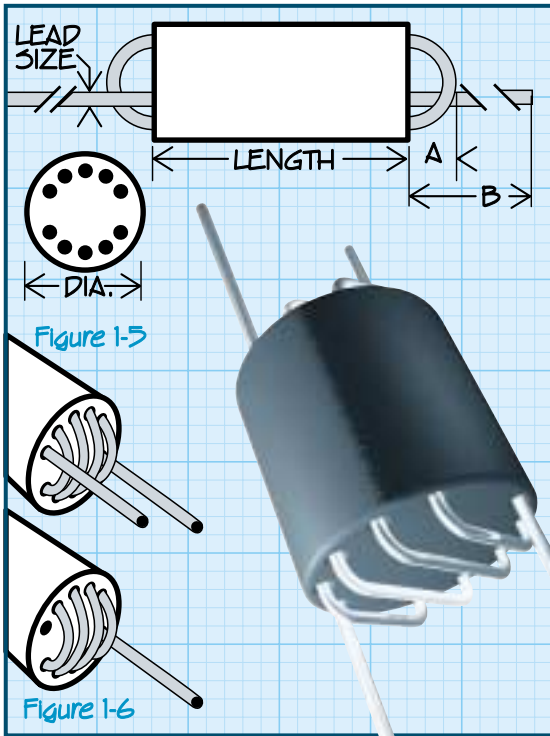
Packaging Bulk only

For more detailed graphs, contact factory



SUPPRESSORS

Wound Beads



DASH NUMBER* FIGURE # OF TURNS MINIMUM IMPEDANCE
@ 10 MHz @ 50 MHz @ 100 MHz @ 150 MHz @ 200 MHz

-2	1-5	2½ x 2	370	590	450	350	280
-4	1-6	4½	700	1100	650	350	270

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Wide Band Chokes 10 hole ferrite slugs, made in API-2 Material, with 2 x 2.5 or 4.5 turns of tinned copper wire.

Applications Interference suppression

Physical Parameters

	Inches	Millimeters
Length	0.388 to 0.402	9.98 to 10.02
Diameter	0.388 to 0.402	9.98 to 10.02
Lead Size		
AWG #24 TCW	0.0185 to 0.0215	0.47 to 0.55
A	0.14 Max.	3.55 Max.
B	1.10 Min.	28.0 Min.

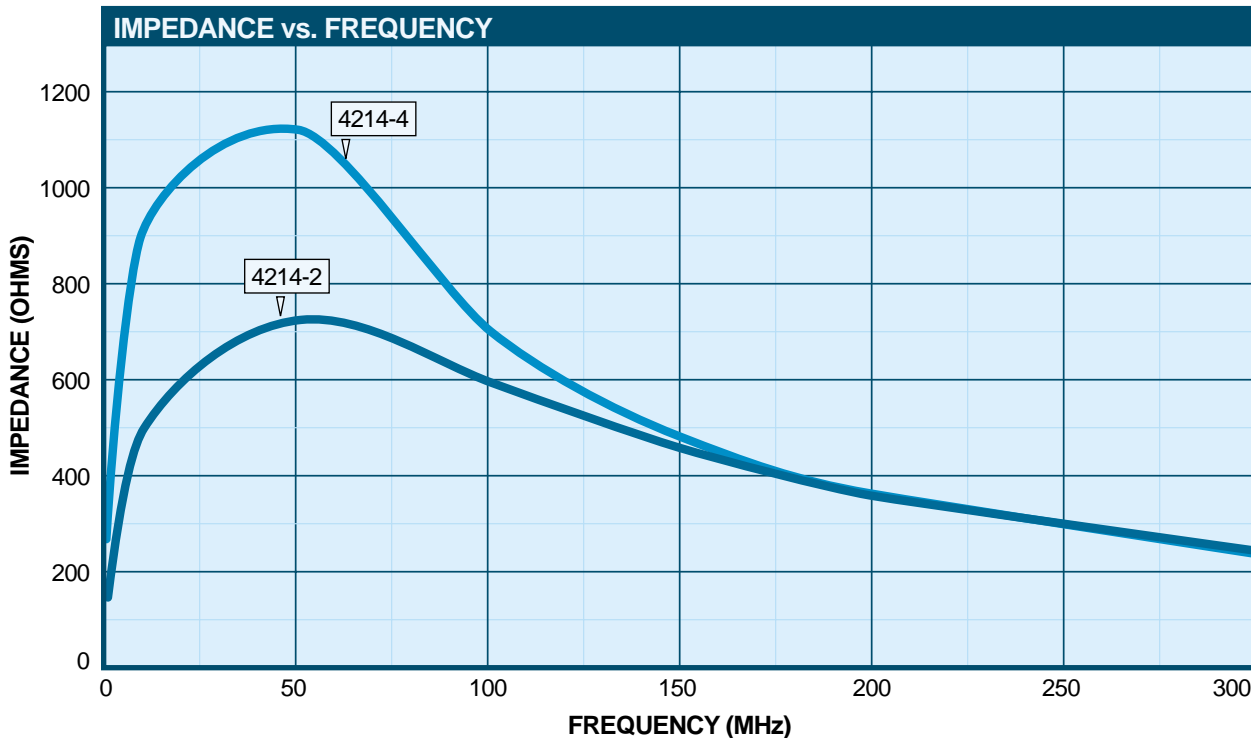
Impedances measured on HP 4191A Impedance Analyzer.

High resistivity ferrite material eliminates the need to insulate windings.

Lead Wire Plated copper

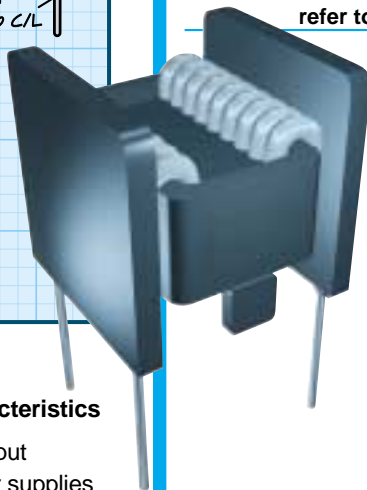
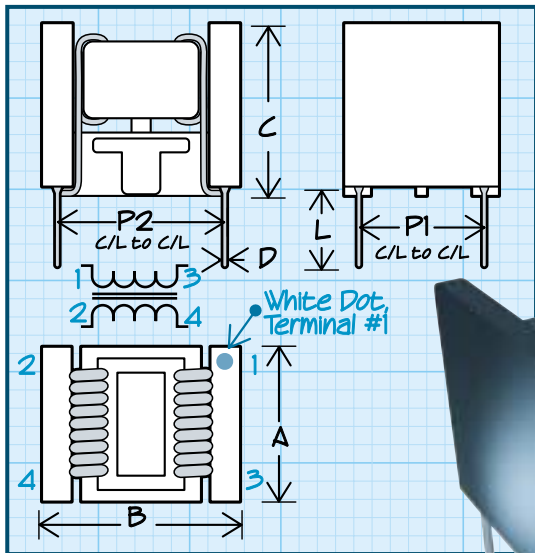
Packaging Bulk only

SUPPRESSORS



For more detailed graphs, contact factory

High Performance Line Filters



Compact sized, high performance ferrites with superior frequency characteristics

A serious countermeasure against output common-mode noise for switching power supplies and switching AC adapters.

Vastly improves noise immunity for personal computers, word processors, peripherals, terminals and equipment using microprocessors.

Physical Parameters

	Inches	Millimeters
A	0.295 Max	7.5 Max
B	0.413 Max	10.5 Max
C	0.314 Max	8.0 Max
D	0.023 Nom	0.6 Nom
L	0.18 ± 0.03	4.6 ± 1.0
P1	0.19 ± 0.01	5.0 ± 0.5
P2	0.295 ± 0.01	7.5 ± 0.5

Operating Temperature Range -55°C to +125°C

Packaging Bulk only.

Mechanical configuration Units designed for easy thru-hole mounting. Ferrite core; base carries a UL94V-O rating.

Insulation Resistance >10 MOhm (100 VDC, between lines)

Test Voltage 200 VDC (1 minute between lines)

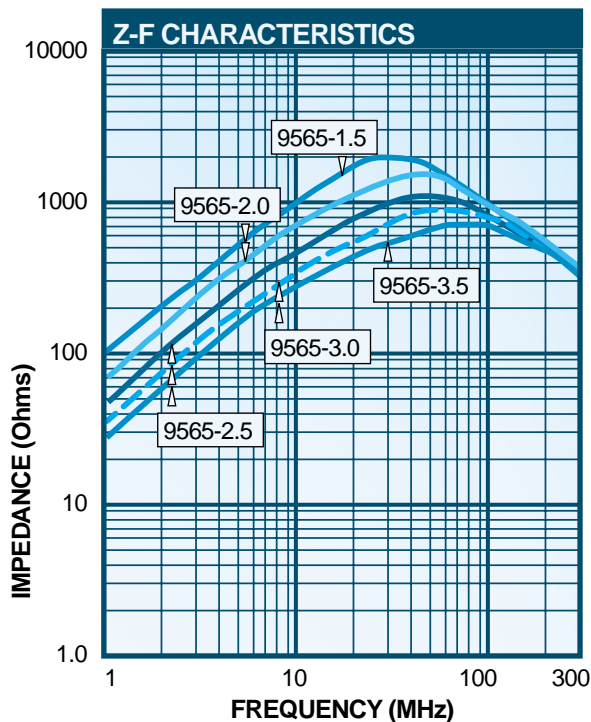
Impedances are measured on the HP4191A Impedance Analyzer.

Inductances are measured on the Wayne Kerr 3245 Inductance Analyzer.

DASH NUMBER*	FREQUENCY RANGE (MHz)	VOLTAGE RATING	INDUCTANCE (µH) Min.	CURRENT RATING MAXIMUM (Amps)	DC RESISTANCE MAXIMUM (mOhms) PER LINE	25 MHz	100 MHz
-1.5	10 - 200	50V	22	1.5	60	1820	900
-2.0	10 - 200	50V	15	2.0	40	1220	900
-2.5	10 - 200	50V	10	2.5	30	780	840
-3.0	10 - 200	50V	7.0	3.0	20	600	760
-3.5	10 - 200	50V	5.0	3.5	15	440	655

*Complete part # must include series # PLUS the dash #

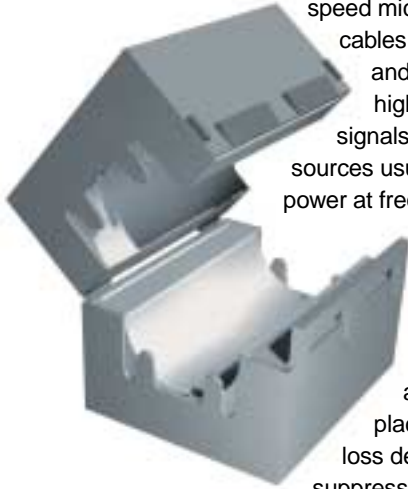
For further surface finish information, refer to TECHNICAL section of this catalog.



For more detailed graphs, contact factory

Split Ferrite Suppressors for Round Cables

Electronic cables and wires, by virtue of their length-to-width ratios, are perfect natural antennas. In the presence of high speed microprocessor signals, cables will conduct, radiate and/or receive unwanted high frequency interfering signals. Radio interference sources usually radiate their RFI power at frequencies above 30



MHz by way of the main cabling, which acts as an antenna. Control of radio interference can be assured by proper placement of an insertion loss device, such as a ferrite suppressor. Any device used to

block an RFI signal between its source and a receiver is an electromagnetic interference (EMI) shield. The measure of this ability to attenuate RFI is shielding effectiveness, "SE", which is expressed in decibels, "dB", the ratio of field strength on one side of the shield to the other side.

One of the most versatile and cost effective shielding methods that can be used today is the API Delevan bisected ferrite cable snap assembly. The bisected styling, or familiar clamshell enclosure design offers the ultimate in adaptability. The RF absorbing material interacts directly with unwanted high frequency energy and dissipates it effectively while allowing data signals to pass unimpeded.

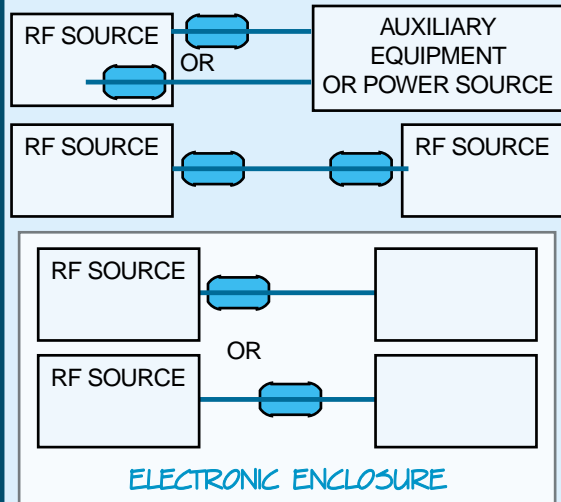


Bisected ferrites have a concentrated, homogeneous magnetic structure with high permeability. These are consistently stable at +20°C to +60°C and provide RF suppression without eddy current losses.

AIR GAP EFFECT

The air gap in bisected ferrites actually extends current carrying capabilities with only an extremely small reduction in impedance versus solid ferrites of the same size. The gap is magnetically insignificant while it is electrically significant as a discontinuity, thereby accommodating more current.

POSITION OF SUPPRESSOR



POSITION OF SUPPRESSOR The suppressor should normally be located close to the cable termination where it exits the enclosure. Where a cable connects two enclosures containing RF sources, a suppressor on each end may be required. For circuits within an enclosure, a position close to the RF is best. However, other locations along the circuit may work as well.

Material and U.L. Data API-1 Material, see characteristics and information on page 121.

Continued on next page

BF Series

Suppressors for Round Cables

DIMENSIONS
Inches ± 0.04; mm ± 1.0

IMPED-
ANCE
(OHMS) *

PART NUMBER
UNITS

BODY TYPE

A

B

C

D

L

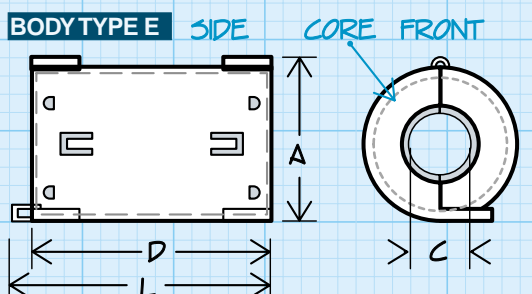
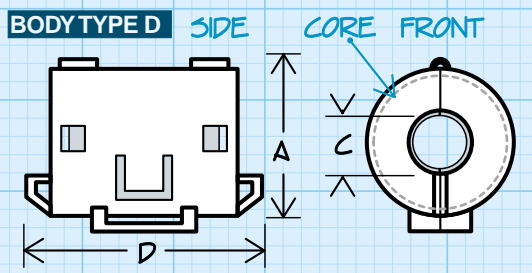
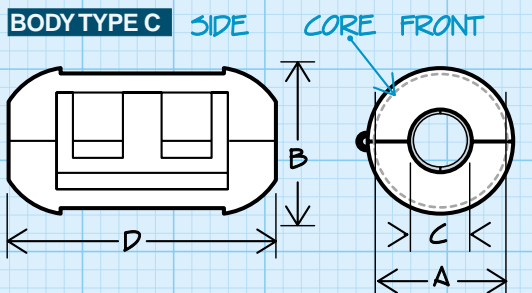
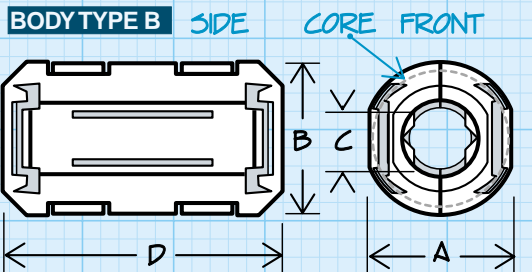
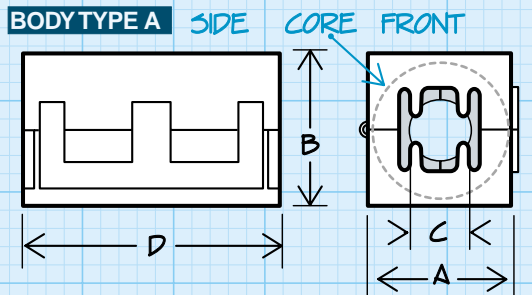
25 MHz

100 MHz

SERIES BF - FOR ROUND CABLES

Part Number	Units	Body Type	A	B	C	D	L	25 MHz	100 MHz
BF2930	in. mm	A	1.16 29.6	1.20 30.5	0.51 13.0	1.30 33.0	—	155	257
BF2223	in. mm	A	0.87 22.3	0.91 23.3	0.39 10.0	1.28 32.6	—	136	250
BF1719	in. mm	A	0.70 17.8	0.76 19.5	0.25 6.5	1.28 32.5	—	171	325
BF1835	in. mm	B	0.70 18.0	0.77 19.7	0.35 9.0	1.37 35.0	—	112	172
BF1125-5	in. mm	B	0.46 11.7	0.51 13.0	0.19 5.0	0.98 25.0	—	96	154
BF1125-3	in. mm	B	0.46 11.7	0.51 13.0	0.13 3.5	0.98 25.0	—	139	191
BF1429	in. mm	C	0.57 14.5	0.61 15.7	0.22 5.6	1.14 29.0	—	85	157
BF1225	in. mm	C	0.50 12.8	0.57 14.7	0.15 4.0	0.98 25.0	—	82	146
BF3024	in. mm	D	1.20 30.5	—	0.45 11.4	0.69 17.7	0.94 24.0	51	103
BF2125	in. mm	D	0.84 21.5	—	0.32 8.15	0.77 19.7	1.01 25.8	50	107
BF2123	in. mm	D	0.84 21.5	—	0.32 8.15	0.66 16.8	0.90 23.0	42	94
BF1835-9	in. mm	E	0.73 18.6	—	0.35 9.0	1.22 31.0	1.38 35.2	126	174
BF3121	in. mm	D	1.24 31.5	—	0.59 15.0	0.60 15.2	0.84 21.5	41	95

SUPPRESSORS



Physical Parameters

Material and U.L. Data API-1 Material, see characteristics and information on page 121.

* **Note** Impedance is typical, based on 1/2 turn (4.0") 18 AWG wire. Impedance measurement using HP4191A.

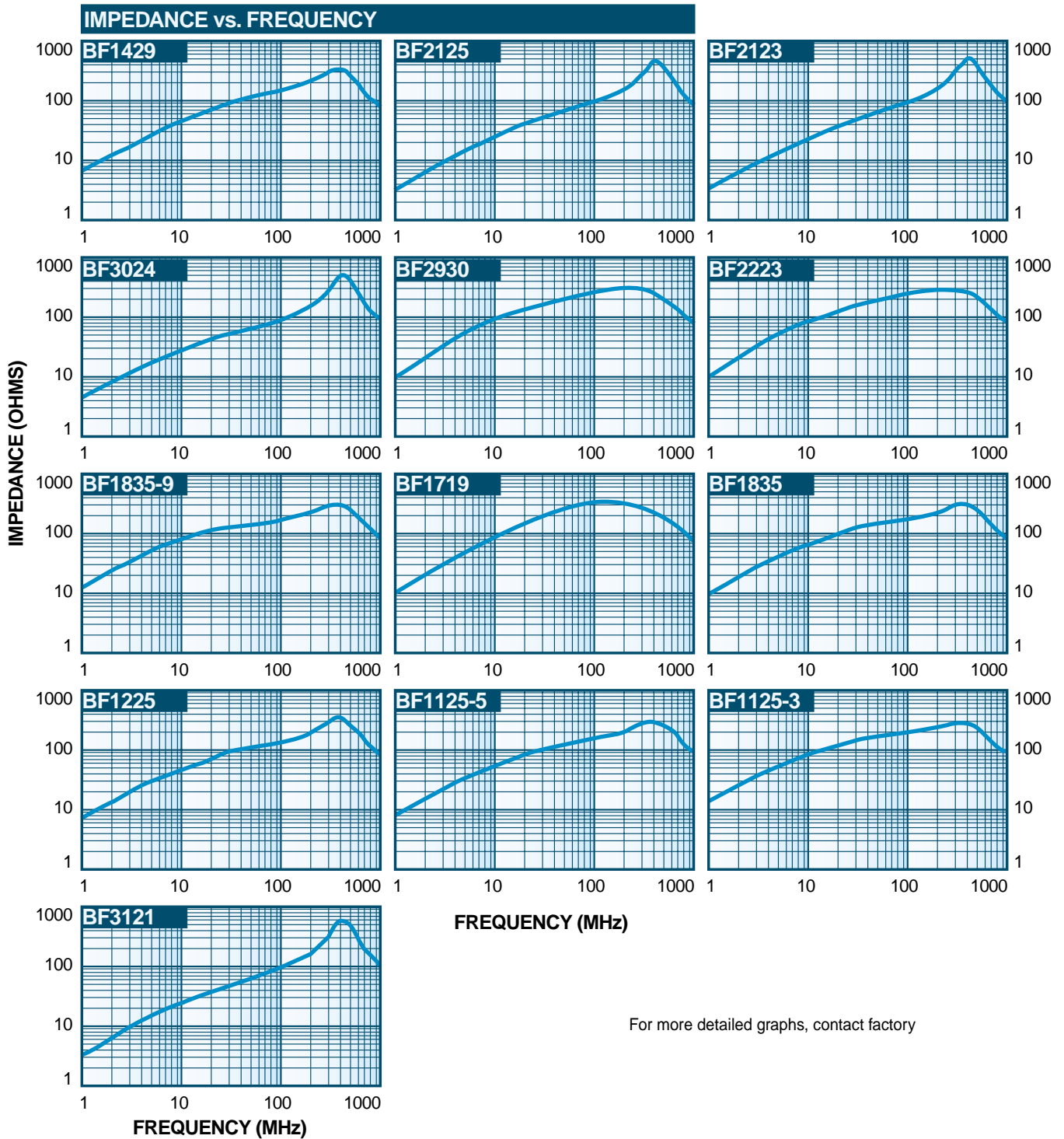
Color Black; Special colors Available for bases on a non-cancellable, non returnable basis C = Cream; W = White; Gr = Grey

U.L. Recognized

All plastic and adhesive components use U.L. Recognized materials with Flammability Ratings of UL94V-0, UL-510 or UL-746C

SEE Z vs. f GRAPHS ON NEXT PAGE

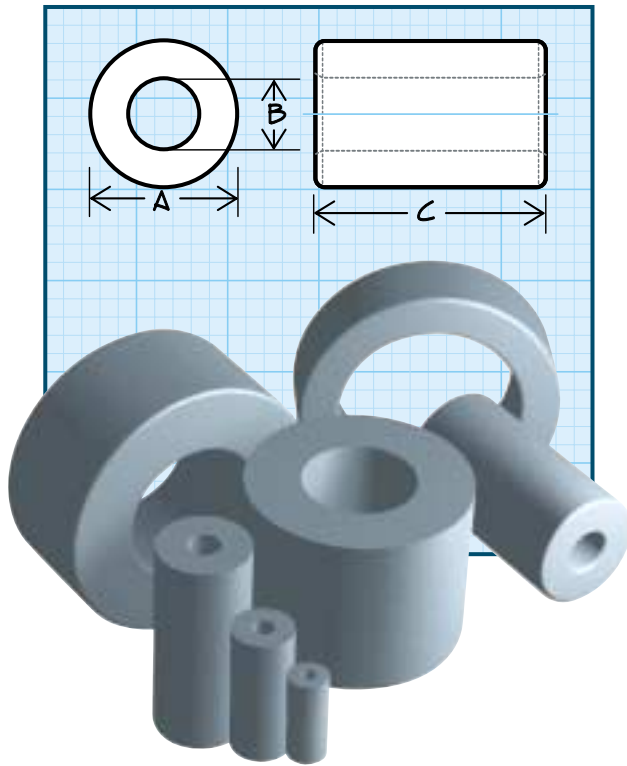
Split Ferrite Suppressors for Round Cables



Additional Information on Preceding Pages

Note Impedance is typical, based on 1/2 turn (4.0") 18 AWG wire.
Impedance measurement using HP4191A

Cylindrical EMI Suppression Ferrites



API's Cylindrical EMI Suppression ferrites provide a cost effective means of reducing common and differential mode EMI. Used to suppress common mode EMI on the internal and external cable assemblies of electronic equipment.

Select a ferrite with an inner diameter most closely matching the outer diameter of the wires to be filtered.

Features

- Wide range of sizes with inner diameters from 1.5 mm (0.059 inches) to 23 mm (0.905 inches)
- Precision formed smooth surfaces prevent damage to wire insulation
- Available in API-1 and API-2 material. See page 121.
- Custom designs available

Applications

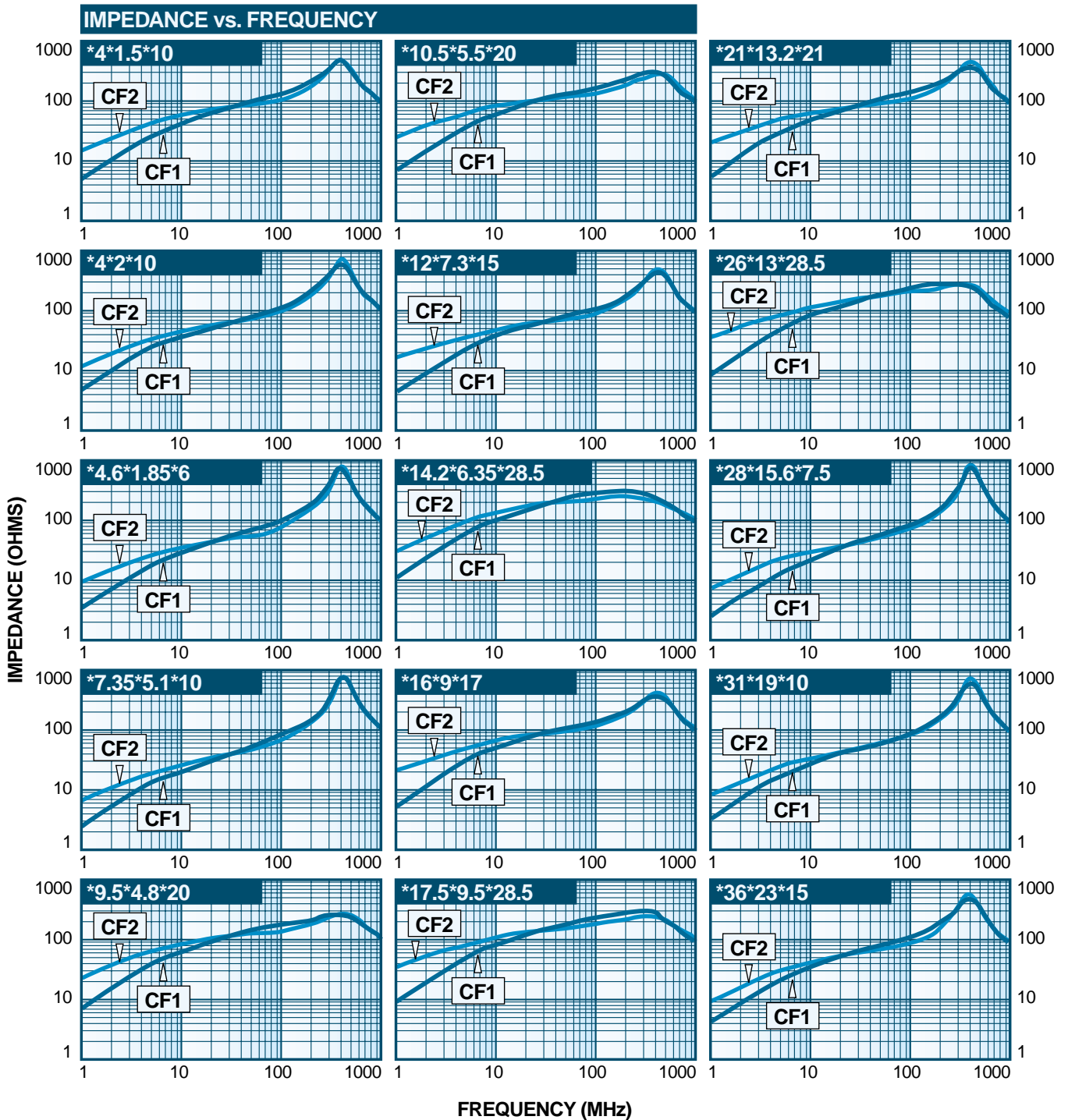
- Internal and external computer data and power cables.

****Note – Impedance Testing** Impedance is typical, measurement using HP4191A. For CF1-4*1.5*10 through CF2-4.6*1.85*6, based on 1/2 turn (4.0") 32 AWG wire. For CF1-7.35*5.1*10 and above, based on 1/2 turn (4.0") 19 AWG wire.

PART NUMBER	IMPEDANCE**			DIMENSION A		DIMENSION B		DIMENSION C	
	@ 25 MHz (Min.)	@ 100 MHz (Typ.)	@ 300 MHz (Typ.)	INCHES	mm	INCHES	mm	INCHES	mm
CF1-4*1.5*10	50	135	300	0.157±.007	4.0±0.2	0.059±.005	1.5±0.15	0.393±.015	10.0±0.4
CF2-4*1.5*10	55	116	269	0.157±.007	4.0±0.2	0.059±.005	1.5±0.15	0.393±.015	10.0±0.4
CF1-4*2*10	40	102	282	0.157±.007	4.0±0.2	0.078±.007	2.0±0.2	0.393±.015	10.0±0.4
CF2-4*2*10	40	86	255	0.157±.007	4.0±0.2	0.078±.007	2.0±0.2	0.393±.015	10.0±0.4
CF1-4.6*1.85*6	35	89	261	0.181±.007	4.6±0.2	0.072±.007	1.85±0.2	0.236±.011	6.0±0.3
CF2-4.6*1.85*6	35	77	237	0.181±.007	4.6±0.2	0.072±.007	1.85±0.2	0.236±.011	6.0±0.3
CF1-7.35*5.1*10	23	68	217	0.289±.011	7.35±0.3	0.200±.007	5.1±0.2	0.393±.015	10.0±0.4
CF2-7.35*5.1*10	23	63	214	0.289±.011	7.35±0.3	0.200±.007	5.1±0.2	0.393±.015	10.0±0.4
CF1-9.5*4.8*20	70	171	263	0.374±.011	9.5±0.3	0.188±.007	4.8±0.2	0.787±.023	20.0±0.6
CF2-9.5*4.8*20	80	142	251	0.374±.011	9.5±0.3	0.188±.007	4.8±0.2	0.787±.023	20.0±0.6
CF1-10.5*5.5*20	65	161	273	0.413±.015	10.5±0.4	0.216±.007	5.5±0.2	0.787±.023	20.0±0.6
CF2-10.5*5.5*20	70	134	261	0.413±.015	10.5±0.4	0.216±.007	5.5±0.2	0.787±.023	20.0±0.6
CF1-12*7.3*15	40	107	273	0.472±.019	12.0±0.5	0.287±.011	7.3±0.3	0.590±.019	15.0±0.5
CF2-12*7.3*15	40	89	242	0.472±.019	12.0±0.5	0.287±.011	7.3±0.3	0.590±.019	15.0±0.5
CF1-14.2*6.35*28.5	115	280	302	0.559±.019	14.2±0.5	0.250±.011	6.35±0.3	1.122±.031	28.5±0.8
CF2-14.2*6.35*28.5	125	230	210	0.559±.019	14.2±0.5	0.250±.011	6.35±0.3	1.122±.031	28.5±0.8
CF1-16*9*17	50	130	281	0.629±.019	16.0±0.5	0.354±.011	9.0±0.3	0.669±.023	17.0±0.6
CF2-16*9*17	55	109	257	0.629±.019	16.0±0.5	0.354±.011	9.0±0.3	0.669±.023	17.0±0.6
CF1-17.5*9.5*28.5	95	217	310	0.688±.023	17.5±0.6	0.374±.011	9.5±0.3	1.122±.031	28.5±0.8
CF2-17.5*9.5*28.5	95	172	296	0.688±.023	17.5±0.6	0.374±.011	9.5±0.3	1.122±.031	28.5±0.8
CF1-21*13.2*21	55	136	309	0.826±.023	21.0±0.6	0.519±.019	13.2±0.5	0.826±.023	21.0±0.6
CF2-21*13.2*21	55	115	305	0.826±.023	21.0±0.6	0.519±.019	13.2±0.5	0.826±.023	21.0±0.6
CF1-26*13*28.5	100	235	325	1.023±.027	26.0±0.7	0.511±.019	13.0±0.5	1.122±.031	28.5±0.8
CF2-26*13*28.5	110	198	316	1.023±.027	26.0±0.7	0.511±.019	13.0±0.5	1.122±.031	28.5±0.8
CF1-28*15.6*7.5	28	85	313	1.102±.031	28.0±0.8	0.614±.019	15.6±0.5	0.295±.011	7.50±0.3
CF2-28*15.6*7.5	28	76	286	1.102±.031	28.0±0.8	0.614±.019	15.6±0.5	0.295±.011	7.50±0.3
CF1-31*19*10	30	91	232	1.220±.031	31.0±0.8	0.748±.023	19.0±0.6	0.393±.015	10.0±0.4
CF2-31*19*10	30	83	320	1.220±.031	31.0±0.8	0.748±.023	19.0±0.6	0.393±.015	10.0±0.4
CF1-36*23*15	40	113	384	1.417±.031	36.0±0.8	0.905±.023	23.0±0.6	0.590±.019	15.0±0.5
CF2-36*23*15	40	101	369	1.417±.031	36.0±0.8	0.905±.023	23.0±0.6	0.590±.019	15.0±0.5

CF Series

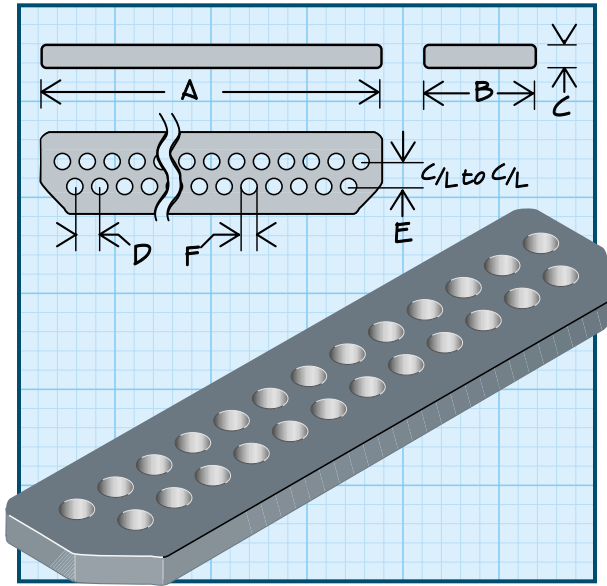
Cylindrical EMI Suppression Ferrites



For more detailed graphs, contact factory

CSP Series

Connector Suppressor Plates

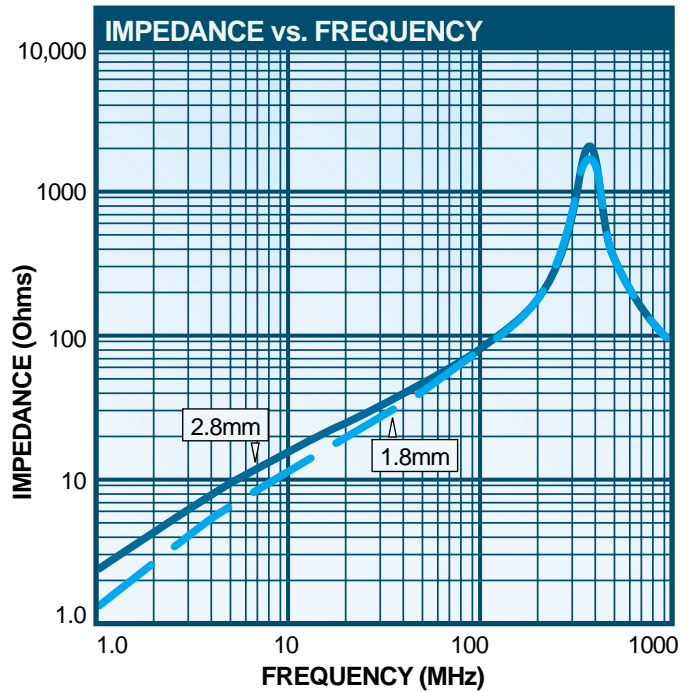


Features

- Differential and common-mode filtering
- Very thin low profile-low mass characteristics
- Excellent pin to pin isolation
- Reduces EMI coupling to cables
- Custom designs available

Applications

- 9,15,25 and 37 pin subminiature "D" connectors
- CRT, mouse, and RS232 with D-sub connectors



For more detailed graphs, contact factory

Material API-1 Material, see characteristics on page 121.

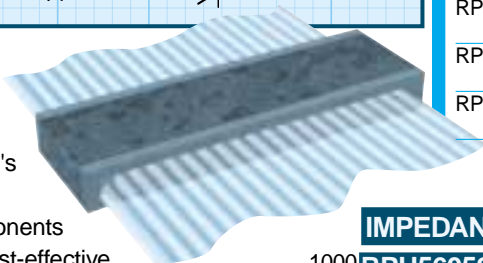
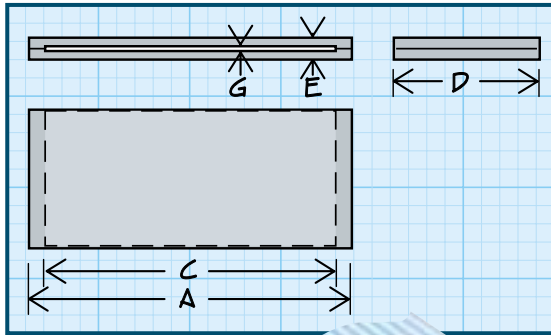
Notes

- 1) Impedances reflect end hole values.
- 2) Interior hole values are significantly higher.
- 3) C Dimension can be modified to suit specific applications.

PART NUMBER	# OF PIN HOLES	UNITS	PHYSICAL PARAMETERS						IMPEDANCE (OHMS) Typ.	
			A	B	C*	D	E	F	25 MHz	100 MHz
CSP 9-1	9	in. mm	0.57±0.019 14.5±.05	0.29±0.011 7.6±0.3	0.07±0.007 1.8±0.2	0.10±0.0010 2.77±0.05	0.11±0.001 2.84±0.05	0.06±0.003 1.57±0.1	25	75
CSP 9-2	9	in. mm	0.57±0.019 14.5±.05	0.29±0.011 7.6±0.3	0.11±0.007 2.8±0.2	0.10±0.0010 2.77±0.05	0.11±0.001 2.84±0.05	0.06±0.003 1.57±0.1	30	80
CSP 15-1	15	in. mm	0.88±0.019 22.6±0.5	0.29±0.011 7.6±0.3	0.07±0.007 1.8±0.2	0.10±0.001 2.77±0.05	0.11±0.001 2.84±0.05	0.06±0.003 1.57±0.1	25	75
CSP 15-2	15	in. mm	0.88±0.019 22.6±0.5	0.29±0.011 7.6±0.3	0.11±0.007 2.8±0.2	0.10±0.001 2.77±0.05	0.11±0.001 2.84±0.05	0.06±0.003 1.57±0.1	30	80
CSP 25-1	25	in. mm	1.43±0.019 36.4±0.5	0.29±0.011 7.6±0.3	0.07±0.007 1.8±0.2	0.10±0.001 2.77±0.05	0.11±0.001 2.84±0.05	0.06±0.003 1.57±0.1	25	75
CSP 25-2	25	in. mm	1.43±0.019 36.4±0.5	0.29±0.011 7.6±0.3	0.11±0.007 2.8±0.2	0.10±0.001 2.77±0.05	0.11±0.001 2.84±0.05	0.06±0.003 1.57±0.1	30	80
CSP 37-1	37	in. mm	2.10±0.019 53.5±0.5	0.29±0.011 7.6±0.3	0.07±0.007 1.8±0.2	0.10±0.001 2.77±0.05	0.11±0.001 2.84±0.05	0.06±0.003 1.57±0.1	25	75
CSP 37-2	37	in. mm	2.10±0.019 53.5±0.5	0.29±0.011 7.6±0.3	0.11±0.007 2.8±0.2	0.10±0.001 2.77±0.05	0.11±0.001 2.84±0.05	0.06±0.003 1.57±0.1	30	80

Series RPC/RPU Split Ferrites

for Flat Cables & Flex Circuits



API Delevan's rectangular "split" components provide a cost-effective means of reducing common mode EMI on flat, ribbon type cable assemblies and flex circuits. They are primarily used to suppress EMI on the internal data cable assemblies of electronic equipment. By reducing the levels radiated by internal cables, these ferrites can reduce the cost and amount of overall shielding required to confine EMI within a product's enclosure.

Physical Parameters

Material, Closure and U.L. Data
API-2 Material, see characteristics and information on page 121.

Slot lengths
52mm (2.04") and 42mm (1.65")

Slot widths 0.8mm (0.03") and 0.4mm (0.015")

Precision formed smooth surfaces
prevent damage to wire insulation

Custom designs available

Applications

- Internal floppy disk and hard disk ribbon cables
- Internal ribbon cables and flex circuitry between circuit boards and data connectors.

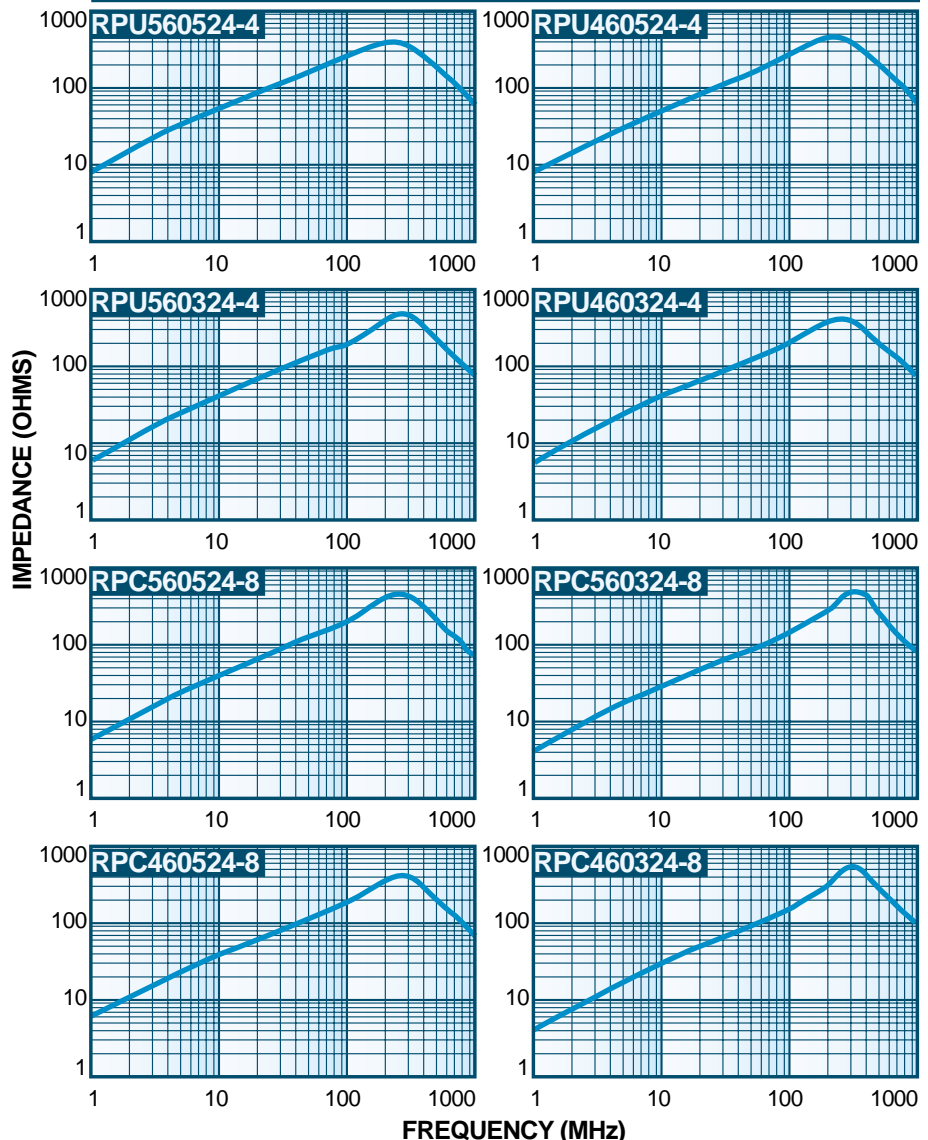
Note Impedance is typical, based on 1/2 turn (4.0") 32 AWG wire. Impedance measurement using HP4191A

PART NUMBER
UNITS
Dimensions
A C D E
Inches ± 0.04 mm ± 1.0
Inches ± 0.04 mm ± 1.0
Inches ± 0.03 mm ± 0.8
Inches ± 0.02 mm ± 0.5
Inches +0.01 -0.006 G
@ 100MHz
IMPEDANCE (OHMS) MIN.
@ 200 MHz

		SERIES RPU								
RPU560524-4	in.	2.20	2.04	0.94	0.20	0.015				
	mm	56.0	52.0	24.0	5.0	0.40	190	315		
RPU560324-4	in.	2.20	2.04	0.94	0.12	0.015				
	mm	56.0	52.0	24.0	3.0	0.40	145	280		
RPU460524-4	in.	1.81	1.65	0.94	0.20	0.015				
	mm	46.0	42.0	24.0	5.0	0.40	190	320		
RPU460324-4	in.	1.81	1.65	0.94	0.12	0.015				
	mm	46.0	42.0	24.0	3.0	0.40	145	280		
		SERIES RPC								
RPC560524-8	in.	2.20	2.04	0.94	0.20	0.03	145	280		
	mm	56.0	52.0	24.0	5.0	0.80				
RPC560324-8	in.	2.20	2.04	0.94	0.12	0.03	105	215		
	mm	56.0	52.0	24.0	3.0	0.80				
RPC460524-8	in.	1.81	1.65	0.94	0.20	0.03	145	290		
	mm	46.0	42.0	24.0	5.0	0.80				
RPC460324-8	in.	1.81	1.65	0.94	0.12	0.03	110	220		
	mm	46.0	42.0	24.0	3.0	0.80				

For more detailed graphs, contact factory

IMPEDANCE vs. FREQUENCY



Properties and Characteristics

API Material 1

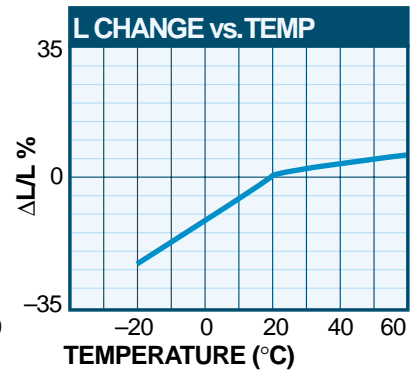
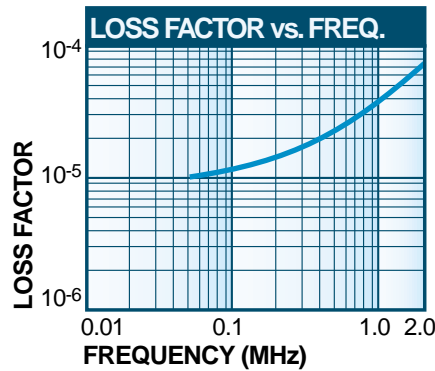
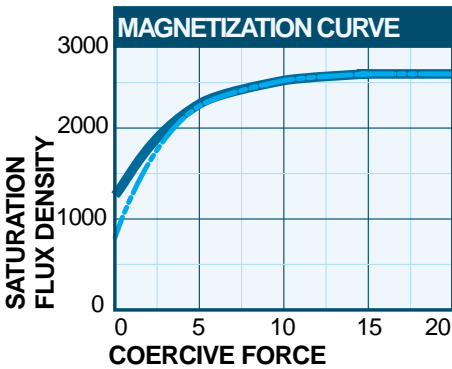
Material	Nickel Zinc
Initial Permeability	650 μ i
Saturation Flux Density (BS)	2700 Gauss
Residual Flux Density (BR)	1200 Gauss
Coercive Force (HC)	0.35 Oersted
Curie Temperature (TC)	200°C
Volume Resistivity (ρ)	10 ⁷ Ohm-cm
Recommended Frequency Range	30 to 300 MHz

Loss Factor (tan/μi)	$\frac{10 \times 10^{-6}}{60 \times 10^{-6}}$ (0.05 MHz)

U.L. Recognized

All plastic and adhesive components use U.L. Recognized materials with Flammability Ratings of UL94V-0, UL-510 or UL-746C

For more detailed graphs, contact factory



API Material 2

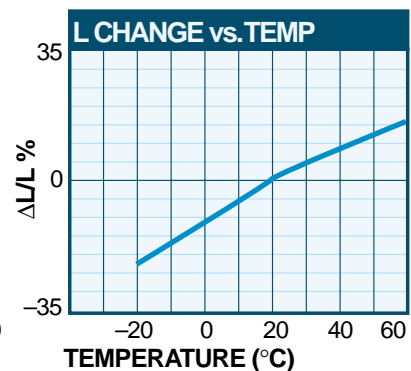
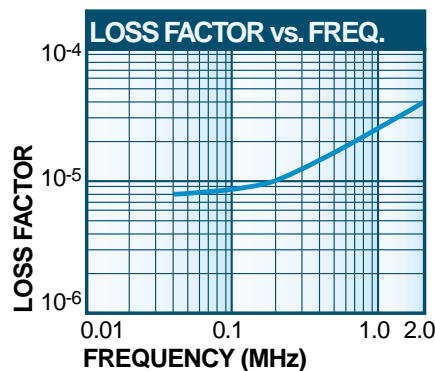
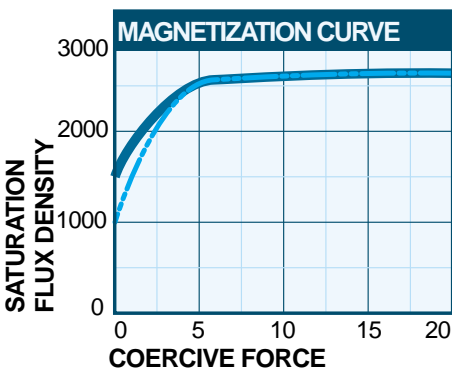
Material	Nickel Zinc
Initial Permeability	1500 μ i
Saturation Flux Density (BS)	2700 Gauss
Residual Flux Density (BR)	1100 Gauss
Coercive Force (HC)	0.20 Oersted
Curie Temperature	150°C
Volume Resistivity (ρ)	10 ⁷ Ohm-cm
Recommended Frequency Range	30 to 300 MHz

Loss Factor (tan/μi)	$\frac{10 \times 10^{-6}}{60 \times 10^{-6}}$ (0.01 MHz)

U.L. Recognized

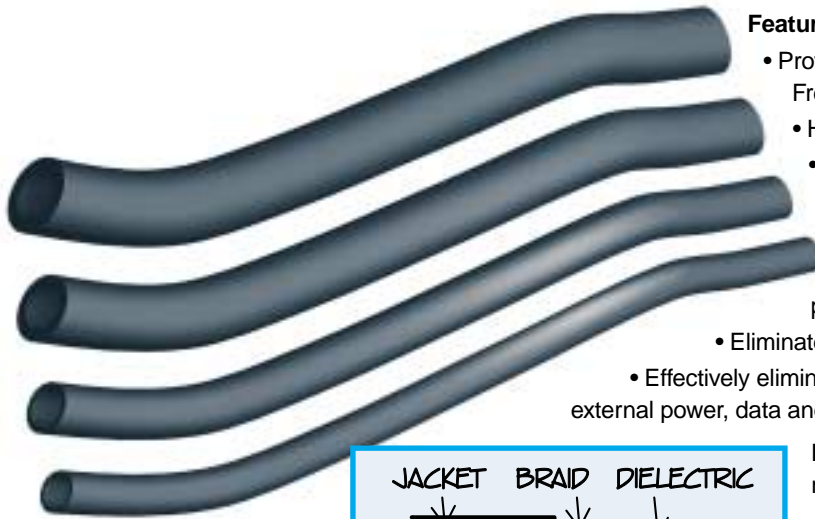
API split ferrites are supplied as a complete set and include a UL Recognized flame retardant, polyimide film tape wrap. Existing polyimide tape can be used as a permanent closure around flat cables/flex circuits. Split ferrites are also available with a 3M Type VHB4926 adhesive mount, easily installed by peeling protective paper strip from base and pressing into place.

For more detailed graphs, contact factory



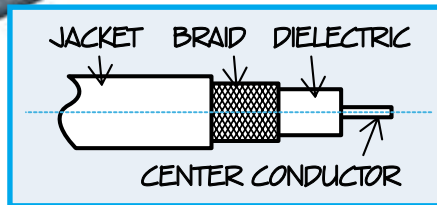
FFAT Series

Flexible Ferrite Absorbent Tubing



Features

- Provides effective EMI Suppression in a wide Frequency Range (10MHz to 3GHz)
- High electrical resistance (10^6 to 10^8)
- Easy and fast to process
- Extremely flexible
- Six sizes to choose from
- Can be incorporated into the over-molding process on cable assemblies
- Eliminates the task of soldering braid
- Effectively eliminates EMI and RFI problems on internal and external power, data and signal lines



Manufactured length 39.37 inches \pm 0.50; 1 meter \pm 12.7 mm

Operating Temperature Range -55°C to $+125^{\circ}\text{C}$

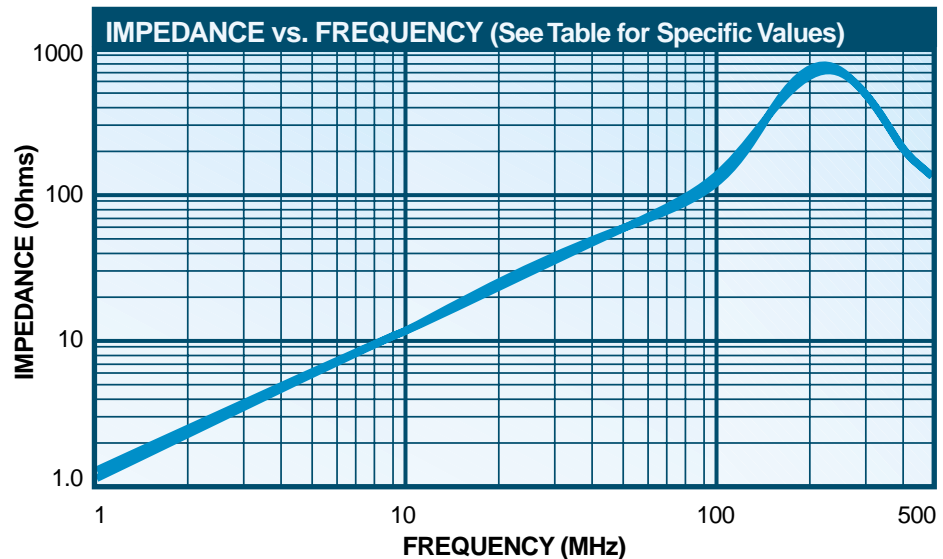
***Note – Impedance Testing** Impedance is typical, based on (10.0") 19 AWG wire, measurement using HP4191A.

Cable Reference Table

Cable	O.D.
Jacket	
RG-8A/U	0.405
RG-9B/U	0.420
RG-55	0.176
RG-58	0.150
RG-58A	0.195
RG-59	0.191
RG-62	0.191
RG-62A	0.242
RG-71	0.208
RG-140	0.176
RG-141	0.146
RG-141A	0.190
RG-142	0.171
RG-174	0.080
RG-178	0.054
RG-179	0.084
RG-179B/U	0.100
RG-180	0.124
RG-187	0.084
RG-187A/U	0.110
RG-188	0.081
RG-188A/U	0.110
RG-195	0.124
RG-196	0.054
RG-210/U	0.242
RG-213/U	0.405
RG-214/U	0.425
RG-223	0.176
RG-303	0.146
RG-316	0.081
RG-316 DS	0.102

Physical Parameters – Sizes available

Part Number		FFAT-32	FFAT-54	FFAT-65	FFAT-96	FFAT-117	FFAT-1410
Outside Diameter	Inches	0.116	0.196	0.255	0.354	0.43	.55
	Millimeters	2.9	5	6.5	9	11	14
Inside Diameter	Inches	0.072	0.157	0.196	0.236	0.275	.393
	Millimeters	1.8	4	5	6	7	10



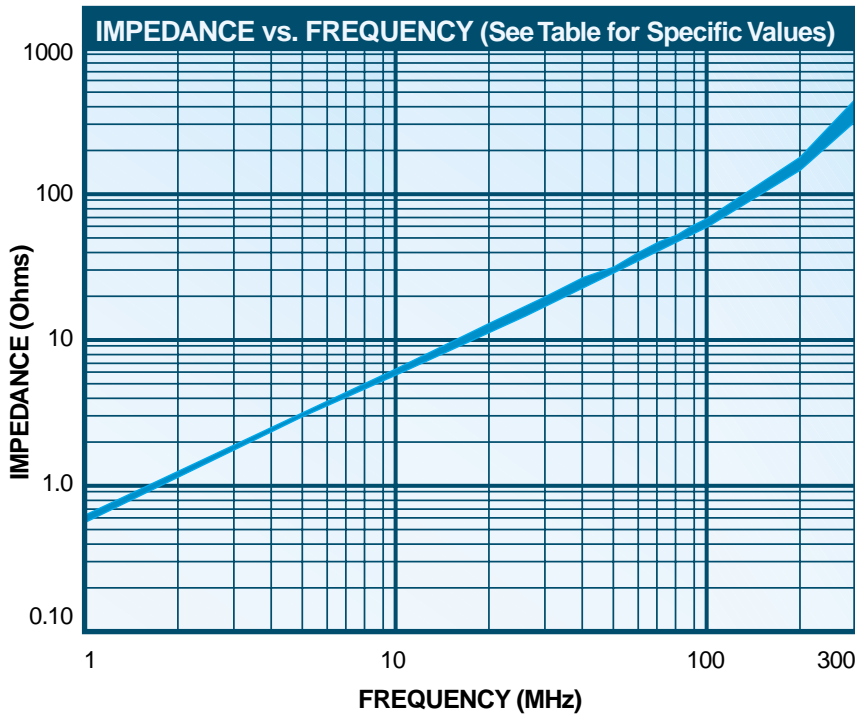
For more detailed graphs, contact factory

TABLE 1: Typical Impedance (Ohms) vs. Frequency Sample piece tested 4.0" long

	10 MHz	30 MHz	50 MHz	100 MHz	200 MHz	300 MHz
FFAT-32	11	34	58	140	579	980
FFAT-54	11	34	58	138	583	1004
FFAT-65	11	34	58	132	587	1023
FFAT-96	11	35	59	134	619	921
FFAT-117	12	35	60	137	656	874
FFAT-1410	12	31	64	149	790	570

FFAM Series

Flexible Ferrite Absorbent Material

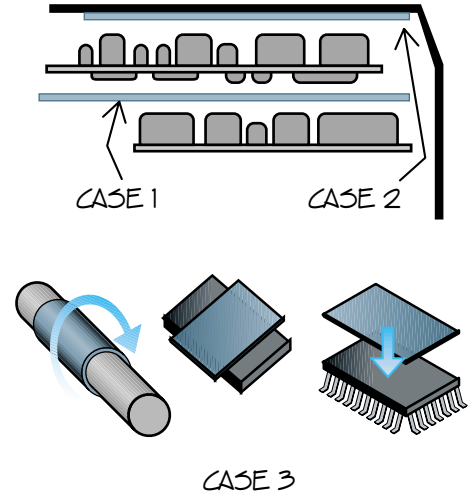


For more detailed graphs, contact factory

IMPEDANCE vs. FREQUENCY TABLE

FREQ.	FFAM025	FFAM06	FFAM10	FFAM15	FFAM20	FFAM25
1	0.52	0.57	0.57	0.59	0.59	0.60
10	5.3	5.3	6	6	6	0.60
20	12	12	12	12	12	12
30	17	17	17	17	17	18
40	23	23	23	23	23	24
50	26	28	29	29	29	30
60	35	35	35	35	35	36
70	41	41	41	41	42	43
80	47	47	47	48	48	49
90	54	54	54	54	55	56
100	55	58	60	61	62	63
200	135	144	150	154	155	159
300	303	349	370	395	396	412

Impedance Measurement using HP4191A



Wide Variety of Uses

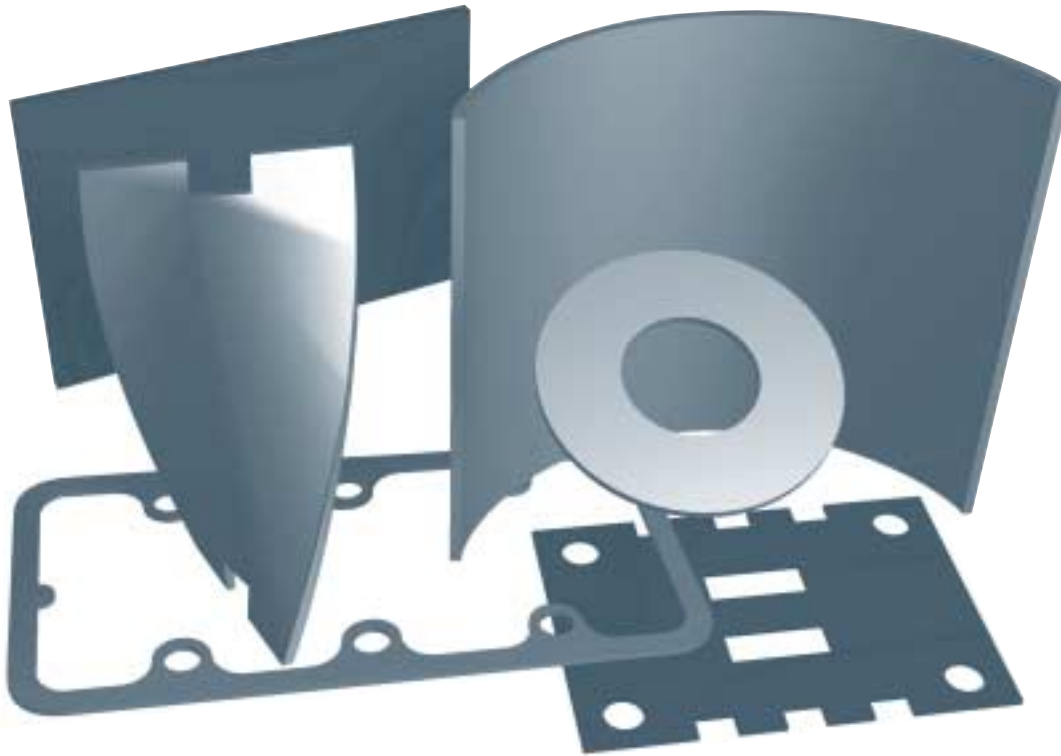
Case 1 To suppress noise generated between circuit boards, apply between boards.

Case 2 To suppress noise generated by casing, apply directly to casing.

Case 3 To suppress unwanted radiation of noises from LSI, IC and cables. For LSI & IC, apply directly to top surface (Caution - thermal conductivity). For flat cables, apply directly. For round cables, wrap around and apply heatshrink material.

FFAM Series

Flexible Ferrite Absorbent Material



Physical Parameters

Available Sizes

Inches	Millimeters
3.93 x 3.93	100 x 100
7.87 x 7.87	200 x 200
11.81 x 11.81	300 x 300
15.75 x 15.75	400 x 400

Thicknesses available

(with MH13008 UL Recognized tape)

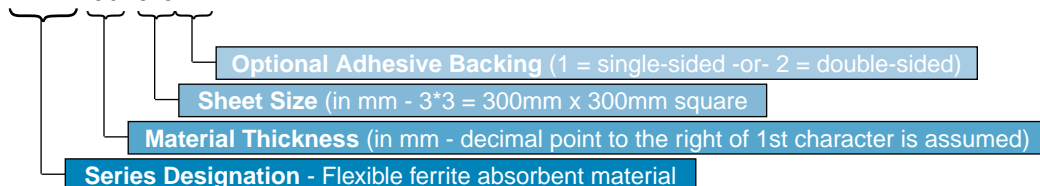
	Inches	Millimeters
FFAM025	0.009	0.25
FFAM06	0.024	0.6
FFAM10	0.039	1.0
FFAM15	0.059	1.5
FFAM20	0.079	2.0
FFAM25	0.098	2.5

Operating Temperature Range

-55°C to +125°C

Ordering Note (Part Numbering Callout)

FFAM 06 3*3 T1



Wide Variety of Uses

Suppress noise generated between circuit boards; Suppress noise generated by casings; Suppress unwanted radiation of noises from LSI, IC and cables.

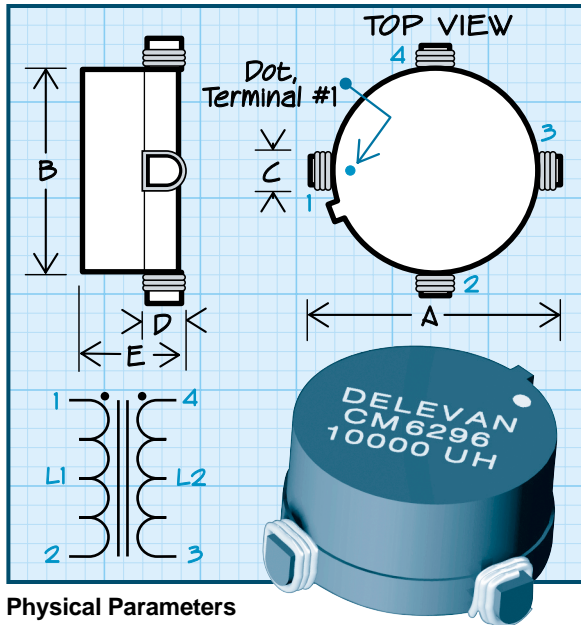
Features

- Provides effective EMI suppression in a wide frequency range (10 MHz to 3 GHz)
- Effective in preventing resonance and suppressing coupling
- Ultra thin (0.25mm through 2.5mm)
- High electrical resistance (10⁶ to 10⁸ Ohms)
- Non-conductive adhesive backing (UL Recognized) available on one or both sides
- Easy and fast to process
- Extremely flexible

Applications

- Notebook and personal computers, workstations
- Peripheral devices for computers
- Anechoic chambers (irregular surface)
- LNB's for satellite systems
- Wireless equipment
- Mobile communications equipment
- Mobile phones
- Base stations
- Consumer electronics
- Gasketing
- High speed clocks

**Common Mode
Choke/Isolation Transformer**



Physical Parameters

	Inches	Millimeters
A	1.058 ± 0.005	26.87 ± 0.13
B	0.870 ± 0.005	22.10 ± 0.13
C	0.210 Max.	5.33 Max.
D	0.200 Max.	5.08 Max.
E	0.423 Max.	10.74 Max.

Mechanical Configuration Flat top surface mount case with excellent coplanarity of terminals

Operating Temperature -55°C to +125°C

Configuration Two inductors per unit; internal terminals: #1 (start)-#2 (finish) & #4 (start) -#3 (finish)

Electrical Configuration

- 1) Inductance and DCR in table is for either L1 or L2
- 2) Leakage Inductance tested at L1 with L2 shorted or at L2 with L1 shorted.
- 3) Windings balanced within 2%
- 4) Inductance tested @ 1.0kHz

Rated DC Current Based Upon 20°C temperature rise from 25°C ambient and zero amp DC

Maximum Power Dissipation at 25°C 2.5 Watts

Marking Terminal identification is for reference only. Number marking does not appear on part. Parts are marked with Delevan, Part Number, Inductance Value, and dot at terminal 1

Packaging Bulk only

DASH NUMBER*

INDUCTANCE (µH) ± 25%

L TEST FREQUENCY (KHz)

LEAKAGE INDUCTANCE (µH) Typ.

DC RESISTANCE MAXIMUM (Ohms)

CURRENT RATING MAXIMUM (Amps)

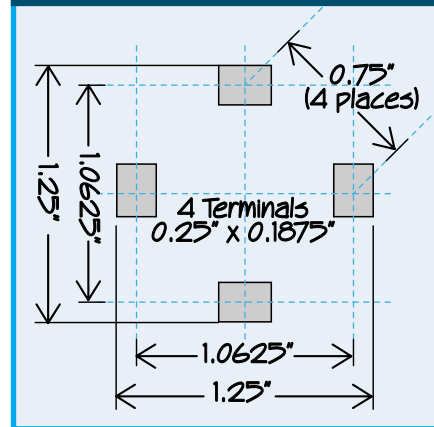
SERIES CM6296

-253	25	1 KHz	0.7	0.014	20.0
-503	50	1 KHz	0.8	0.014	20.0
-104	100	1 KHz	1.4	0.016	19.0
-154	150	1 KHz	1.8	0.016	19.0
-204	200	1 KHz	2.2	0.016	17.0
-304	300	1 KHz	3.3	0.020	15.0
-454	450	1 KHz	4.6	0.024	13.0
-654	650	1 KHz	6.2	0.030	11.0
-105	1000	1 KHz	9.3	0.050	7.0
-155	1500	1 KHz	14.5	0.090	5.0
-255	2500	1 KHz	21.8	0.162	4.4

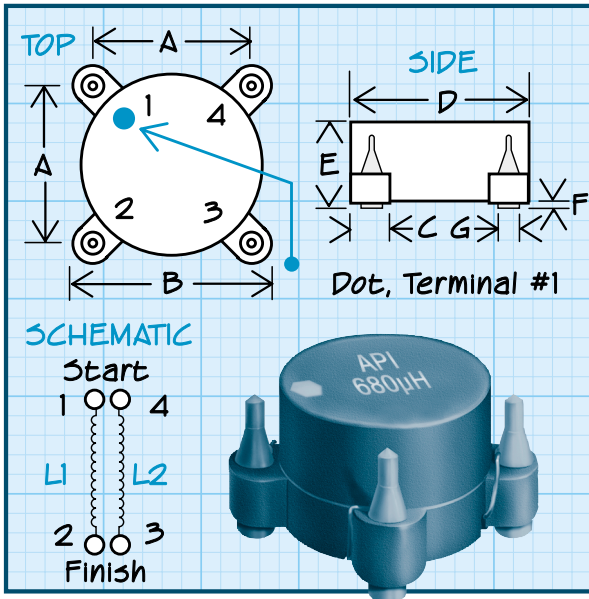
*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

LAND PATTERN DIMENSIONS



Surface Mount
Low Profile CM Choke



Mechanical Configuration A flat top surface mount case with excellent coplanarity of terminals.

Physical Parameters

	Inches	Millimeters
A	0.212 ± 0.010	5.38 ± 0.25
B	0.285 ± 0.010	7.24 ± 0.25
C	0.060 ± 0.010	1.52 ± 0.25
D	0.250 ± 0.010	6.35 ± 0.25
E	0.200 ± 0.010	5.08 ± 0.25
F	0.025 ± 0.010	0.64 ± 0.2
G	0.40 Ref	1.02 Ref

Electrical Configuration

- 1) Inductance and DCR in table is for either L1 or L2.
- 2) Leakage Inductance tested at L1 with L2 shorted or at L2 with L1 shorted.
- 3) Windings balanced within 2%
- 4) Inductance tested @ 10 kHz

Operating Temperature Range -55°C to +105°C

Electrical Characteristics Measured at +25°C

Rated RMS Current Based upon 40°C temperature rise from 25°C ambient.

Maximum Power Dissipation at 25°C 0.200 Watts

Inductance Tolerance Units are supplied to the tolerance indicated in the table.

Marking Parts are printed with API, Inductance Value, and dot at terminal #1.

Packaging Tape & reel (16mm):
13" reel, 800 pieces max.; 7" reel not available

DASH NUMBER*

L1 OR L2 INDUCTANCE
±1-25% (µH)

DCR (OHMS) Max.

RATED RMS CURRENT
(AMPS) MAX

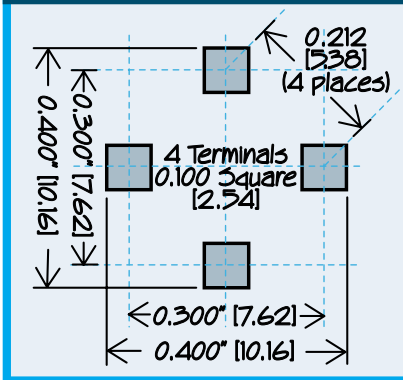
LEAKAGE INDUCTANCE
(µH) TYPICAL

	SERIES CM6149			
-253	25	.010	3.0	0.20
-473	47	.015	2.5	0.30
-683	68	.020	2.0	0.40
-104	100	.030	1.6	0.50
-154	150	.040	1.3	0.70
-224	220	.060	1.0	1.10
-334	330	.090	.75	1.50
-474	470	.125	.60	1.70
-684	680	.170	.50	2.00
-105	1000	.250	.40	2.80
-125	1200	.350	.30	3.50
-155	1500	.500	.24	4.30
-225	2200	.750	.18	6.00

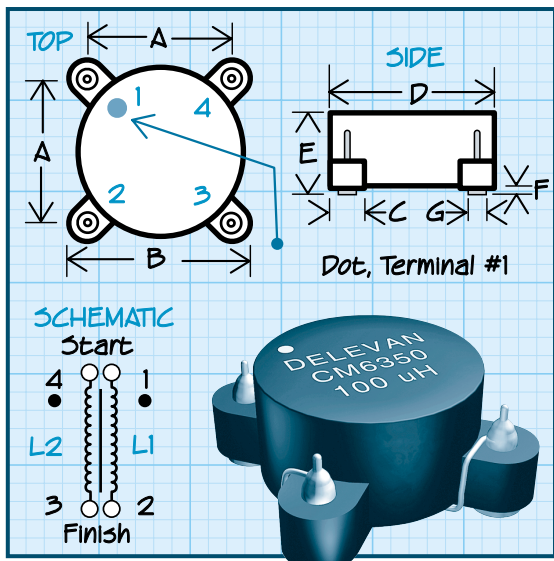
*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

**RECOMMENDED
LAND PATTERN DIMENSIONS**



Surface Mount
Common Mode Choke



Mechanical Configuration A flat top surface mount case with excellent coplanarity of terminals.

Physical Parameters

	Inches	Millimeters
A	0.285 ± 0.010	7.24 ± 0.25
B	0.360 ± 0.010	9.14 ± 0.25
C	0.060 ± 0.010	1.52 ± 0.25
D	0.350 ± 0.010	8.90 ± 0.25
E	0.200 ± 0.010	5.08 ± 0.25
F	0.025 ± 0.010	0.64 ± 0.25
G	0.040 (Ref. only)	1.02 (Ref. only)

Electrical Configuration

- 1) Inductance and DCR in table is for either L1 or L2.
- 2) Leakage Inductance tested at L1 with L2 shorted or at L2 with L1 shorted.
- 3) Windings balanced within 2%
- 4) Inductance tested @ 10 kHz

Operating Temperature Range -55°C to +105°C

Electrical Characteristics Measured at +25°C

Rated RMS Current Based upon 40°C temperature rise from 25°C ambient

Maximum Power Dissipation at 25°C 0.400 Watts

Inductance Tolerance Units are supplied to the tolerance indicated in the tables @ 10 KHz

Marking Parts are printed with Delevan, Inductance Value, and dot at terminal #1.

Packaging Tape & reel (24mm):

13" reel, 600 pieces max.; 7" reel not available

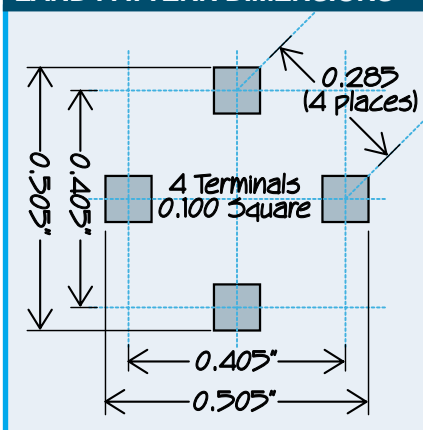
DASH NUMBER*
L1 or L2 INDUCTANCE
±25% (µH)
DCR (Ohms) Max.
RATED RMS CURRENT
(Amps) Max
LEAKAGE INDUCTANCE
(µH) Typical

FERRITE CORE				
-333	33	0.007	5.50	0.20
-473	47	0.008	5.00	0.30
-683	68	0.010	4.20	0.42
-104	100	0.014	3.30	0.55
-154	150	0.020	2.70	0.85
-224	220	0.027	2.20	1.20
-334	330	0.040	1.80	1.80
-474	470	0.060	1.50	1.60
-684	680	0.090	1.20	2.10
-105	1000	0.130	0.90	2.80
-155	1500	0.190	0.75	4.20
-225	2200	0.300	0.60	6.00
-335	3300	0.550	0.40	9.00
-475	4700	1.050	0.25	13.00

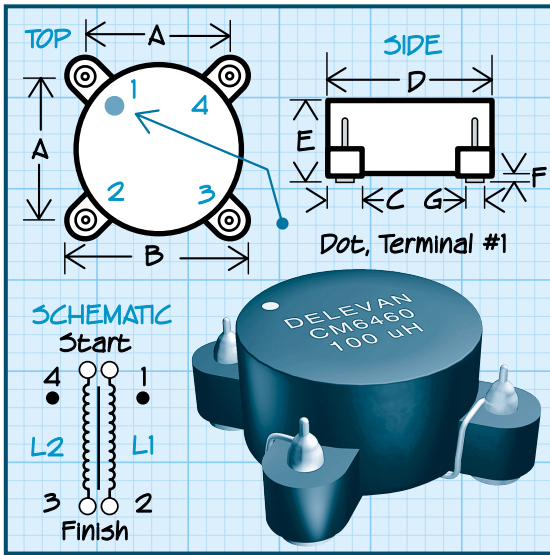
*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

LAND PATTERN DIMENSIONS



Surface Mount
Common Mode Choke



Mechanical Configuration A flat top surface mount case with excellent coplanarity of terminals.

Physical Parameters

	Inches	Millimeters
A	0.400 ± 0.010	10.16 ± 0.25
B	0.530 ± 0.010	13.46 ± 0.25
C	0.125 ± 0.010	3.17 ± 0.25
D	0.490 ± 0.010	12.44 ± 0.25
E	0.290 ± 0.010	7.37 ± 0.25
F	0.030 ± 0.010	0.76 ± 0.25
G	0.060 (Ref. only)	1.52 (Ref. only)

Electrical Configuration

- 1) Inductance and DCR in table is for either L1 or L2.
- 2) Leakage Inductance tested at L1 with L2 shorted or at L2 with L1 shorted.
- 3) Windings balanced within 2%
- 4) Inductance tested @ 10 kHz

Operating Temperature Range -55°C to +105°C

Electrical Characteristics Measured at +25°C

Rated RMS Current Based upon 40°C temperature rise from 25°C ambient

Maximum Power Dissipation at 25°C 0.605 Watts

Inductance Tolerance Units are supplied to the tolerance indicated in the tables @ 10KHz

Marking Parts are printed with Delevan, Inductance Value, and dot at terminal #1.

Packaging Tape & reel (24mm):

13" reel, 350 pieces max.; 7" reel not available

DASH NUMBER*

L1 or L2 INDUCTANCE
±25% (µH)

DCR (Ohms) Max.

RATED RMS CURRENT
(Amps) Max

LEAKAGE INDUCTANCE
(µH) Typical

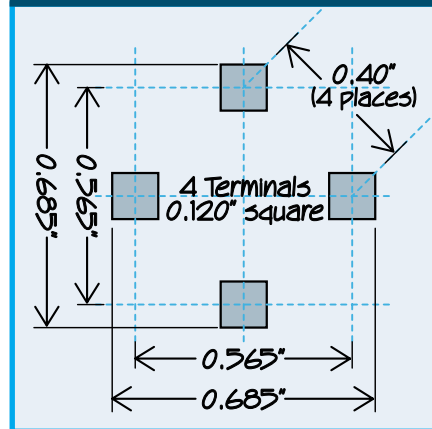
FERRITE CORE

-104	100	0.006	7.00	0.7
-154	150	0.010	5.50	1.0
-224	220	0.012	5.00	1.4
-334	330	0.017	4.00	1.8
-504	500	0.024	3.30	2.2
-754	750	0.035	2.70	3.0
-105	1000	0.049	2.20	4.0
-125	1200	0.068	1.70	5.0
-185	1800	0.106	1.40	5.5
-225	2200	0.150	1.10	7.0
-335	3300	0.210	0.85	9.5
-505	5000	0.320	0.70	14.0
-755	7500	0.640	0.44	22.0
-106	10000	0.900	0.33	29.0

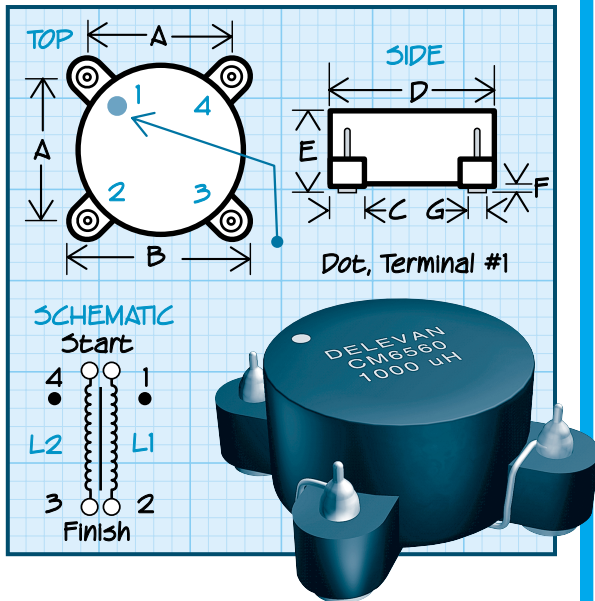
*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

LAND PATTERN DIMENSIONS



Surface Mount
Common Mode Choke



Mechanical Configuration A flat top surface mount case with excellent coplanarity of terminals.

Physical Parameters

	Inches	Millimeters
A	0.495 ± 0.010	12.6 ± 0.25
B	0.630 ± 0.010	16.0 ± 0.25
C	0.150 ± 0.010	3.81 ± 0.25
D	0.620 ± 0.010	15.8 ± 0.25
E	0.310 ± 0.010	7.88 ± 0.25
F	0.030 ± 0.010	0.76 ± 0.25
G	0.070 (Ref. only)	1.78 (Ref. only)

Electrical Configuration

- 1) Inductance and DCR in table is for either L1 or L2.
- 2) Leakage Inductance tested at L1 with L2 shorted or at L2 with L1 shorted.
- 3) Windings balanced within 2%
- 4) Inductance tested @ 10 kHz

Operating Temperature Range -55°C to +105°C

Electrical Characteristics Measured at +25°C

Rated RMS Current Based upon 40°C temperature rise from 25°C ambient.

Maximum Power Dissipation at 25°C 0.725 Watts

Inductance Tolerance Units are supplied to the tolerance indicated in the tables @ 10kHz.

Marking Parts are printed with Delevan, Inductance Value, and dot at terminal #1.

Packaging Tape & reel (24mm): 13" reel, 350 pieces max.; 7" reel not available

DASH NUMBER*

L1 or L2 INDUCTANCE
±25% (µH)

DCR (Ohms) Max.

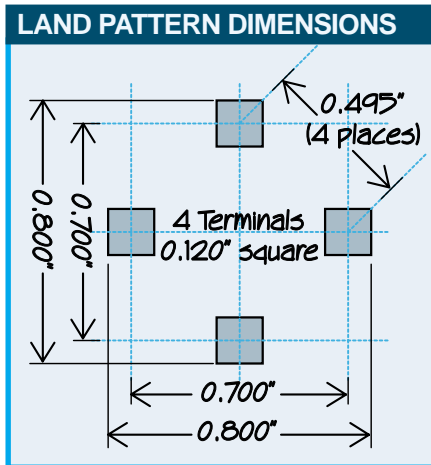
RATED RMS CURRENT
(Amps) Max

LEAKAGE INDUCTANCE
(µH) Typical

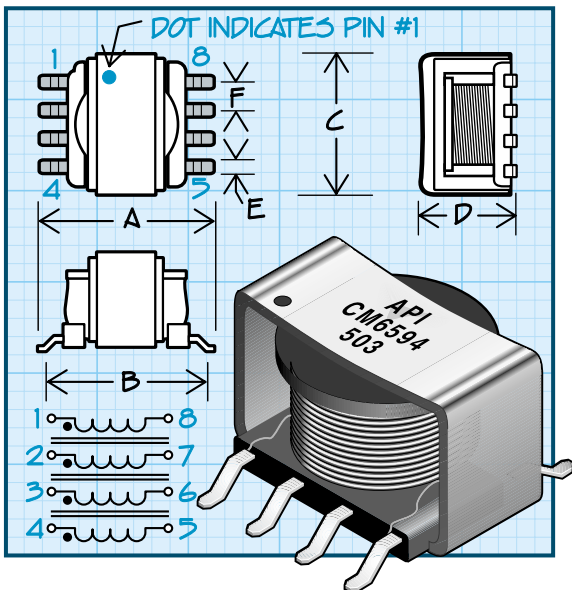
FERRITE CORE				
-104	100	0.005	8.50	0.9
-184	180	0.007	7.00	1.2
-334	330	0.015	4.80	2.7
-504	500	0.023	3.60	4.5
-754	750	0.034	3.00	6.8
-105	1000	0.047	2.40	8.6
-185	1800	0.080	1.90	13.0
-225	2200	0.105	1.50	19.0
-335	3300	0.160	1.20	18.0
-505	5000	0.240	0.95	26.0
-755	7500	0.360	0.75	35.0
-106	10000	0.530	0.55	45.0
-126	12000	0.730	0.45	55.0
-156	15000	1.050	0.35	68.0

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.



**4-Winding
Surface Mount Transformers**



Physical Parameters

	Inches	Millimeters
A	0.435 to 0.465	11.05 to 11.81
B	0.385 to 0.405	9.78 to 10.29
C	0.375 to 0.405	9.53 to 10.29
D	0.205 to 0.235	5.21 to 5.97
E (8 places)	0.028 typ.	0.71 typ.
F (6 places)	0.079 typ.	2.00 typ.

Mechanical Configuration

ER Core on an 8 Pin Surface Mount Base

Operating Temperature Range -20°C to +80°C

Maximum Power Dissipation at 25°C 0.140 W

Dielectric Withstanding Voltage

500V RMS, 60Hz, 5 sec.

Current Rating Current which will cause less than a +35°C temperature rise maximum, from +25°C Ambient, with all windings connected in series

- Notes** ** 1) Max. leakage inductance measured @ 1 KHz on Pin 1-8 with all other pins shorted.
2) Board connections may be altered to create different transformer/inductor configurations.

Custom Applications Consult factory

Packaging Tape & reel (24mm): 13" reel, 600 pieces max.; 7" reel not available

Made In the U.S.A.

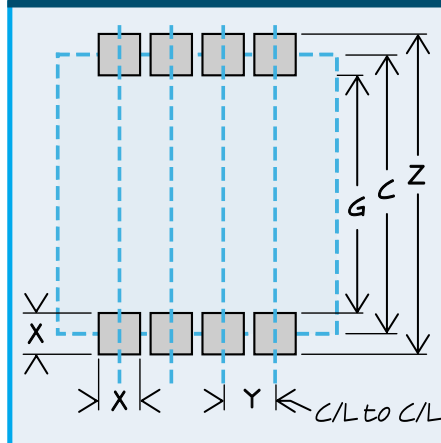
DASH NUMBER*
INDUCTANCE Each WINDING (µH) ±25%
TEST FREQUENCY (KHz)
MAXIMUM LEAKAGE INDUCTANCE (µH)*
DC RESISTANCE (OHMS) Each WINDING
MAXIMUM CURRENT RATING (Amps) Each WINDING

CM6594 SERIES					
-253	25	1 KHz	0.90	0.04	1.00
-503	50	1 KHz	1.10	0.07	0.90
-104	100	1 KHz	1.30	0.13	0.75
-154	150	1 KHz	1.50	0.19	0.60
-254	250	1 KHz	1.70	0.32	0.50
-504	500	1 KHz	4.30	0.56	0.45
-754	750	1 KHz	6.80	0.90	0.38
-105	1000	1 KHz	6.95	1.19	0.30
-155	1500	1 KHz	7.00	1.90	0.25

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

PAD DIMENSIONS



Pad Dimensions

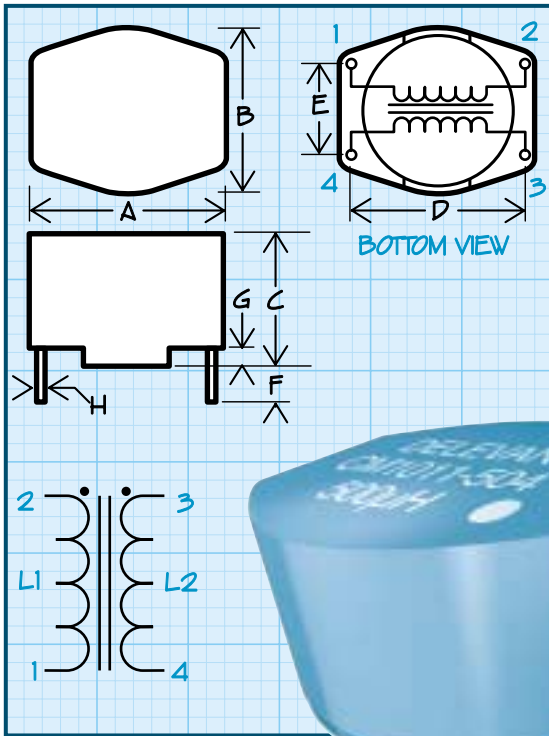
	Inches	Millimeters
C	0.425	10.80
G	0.368	9.35
X	0.063	1.60
Y	0.079	2.00
Z	0.492	12.50

Series CM1011R CM1011

RoHS
Compliant

Traditional
First Quality

Horizontal PC Mount Epoxy Potted Common Mode Chokes



Physical Parameters

	Inches	Millimeters
A	1.10 ± 0.03	27.9 ± 0.76
B	1.10 ± 0.03	27.9 ± 0.76
C	0.70 ± 0.03	17.8 ± 0.76
D	1.00 ± 0.03	25.4 ± 0.76
E	0.600 ± 0.03	15.2 ± 0.76
F	0.200 Min.	5.08 Min.
G	0.075 (Ref. Only)	1.91 (Ref. Only)
H	0.032 ± 0.004	0.81 ± 0.10

Operating Temperature Range -55°C to +125°C

Current Rating at 85°C Ambient 40°C Rise

Mechanical Configuration Epoxy potted winding assembly. Case is high-temperature DAP.

Notes

- 1) Inductance in table is for either L 1 or L2.
- 2) Leakage Inductance tested at L 1 with L2 shorted or at L2 with L 1 shorted.
- 3) Windings balanced within 2%

Packaging Bulk only

DASH NUMBER*

L (µH), L1 or L2
@ 1 KHz ± 25%

DC RESISTANCE
MAXIMUM (Ohms)

CURRENT RATING
MAXIMUM (Amps)

LEAKAGE
INDUCTANCE
MAXIMUM (µH)

-104	100	0.004	12	6
-254	250	0.006	10	9
-504	500	0.008	8.6	12
-754	750	0.013	6.7	15
-105	1000	0.018	5.7	19
-175	1700	0.060	3.1	26
-255	2500	0.073	2.8	32
-335	3300	0.125	2.2	51
-505	5000	0.150	2.0	72
-755	7500	0.300	1.4	94
-106	10000	0.390	1.2	103

*Complete part # must include series # PLUS the dash #

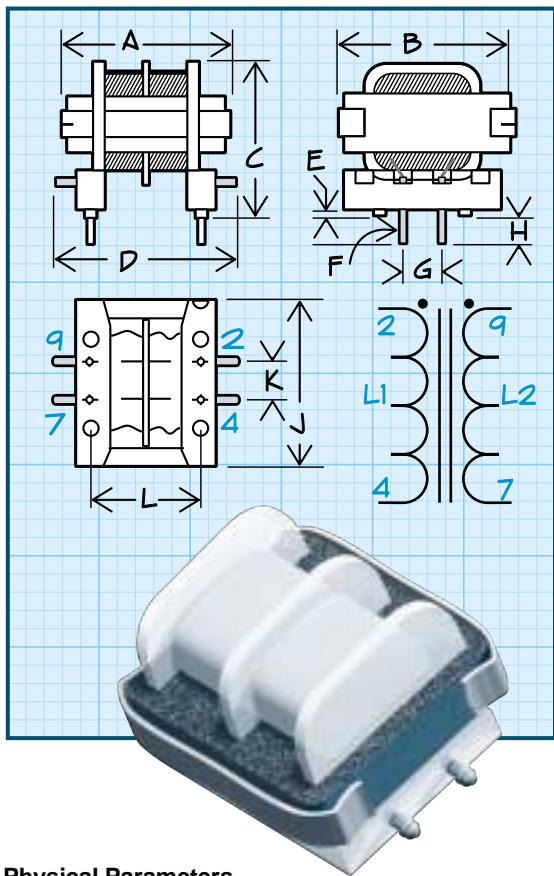
For further surface finish information,
refer to TECHNICAL section of this catalog.

Series CM7560R CM7560

RoHS
Compliant

Traditional
First Quality

PC Mount Common Mode Choke



Physical Parameters

	Inches	Millimeters
A	0.860 ± 0.025	21.8 ± 0.64
B	1.070 ± 0.050	27.2 ± 1.27
C	0.830 ± 0.030	21.1 ± 0.76
D	1.060 (Ref. Only)	26.9 (Ref. Only)
E	0.040 ± 0.025	1.0 ± 0.64
F	0.025 Sq. (Typ.)	0.64 Sq. (Typ.)
G	0.400 ± 0.010	10.2 ± 0.3
H	0.175 ± 0.015	4.4 ± 0.38
J	1.03 (Ref. Only)	26.2 (Ref. Only)
K	0.400 ± 0.010	10.2 ± 0.3
L	0.630 ± 0.010	16.0 ± 0.3

Operating Temperature Range -55°C to +125°C

Current Rating at 85°C Ambient 40°C Rise

Mechanical Configuration Tape wrapped winding sections; varnish impregnated assembly

Notes 1) Inductance in table is for either L1 or L2.
2) Leakage Inductance tested at L1 with L2 shorted or at L2 with L1 shorted. 3) Windings balanced within 1%.

Packaging Bulk only

DASH NUMBER*

L (µH) L1 or L2
@ 1kHz ± 25%

DC RESISTANCE
MAXIMUM (Ohms)

CURRENT RATING
MAXIMUM (Amps)

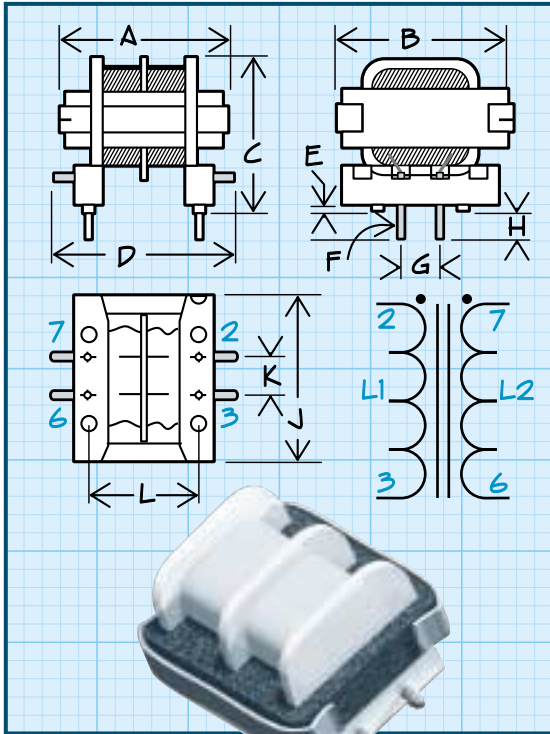
LEAKAGE
INDUCTANCE
MAXIMUM (µH)

-563	56	0.013	5.5	3.5
-683	68	0.013	5.5	3.5
-823	82	0.013	5.5	3.5
-104	100	0.013	5.5	3.5
-124	120	0.015	5.5	4.5
-154	150	0.015	5.5	6.0
-184	180	0.019	4.5	7.0
-224	220	0.020	4.5	7.5
-274	270	0.025	4.5	9.0
-334	330	0.025	3.5	12
-474	470	0.030	3.5	14
-564	560	0.035	3.5	18
-684	680	0.040	3.5	20
-824	820	0.060	2.8	24
-105	1000	0.065	2.8	30
-125	1200	0.095	2.2	35
-155	1500	0.115	1.7	40
-185	1800	0.125	1.7	45
-225	2200	0.170	1.4	55
-275	2700	0.180	1.4	75
-335	3300	0.320	1.1	90
-395	3900	0.400	1.1	100
-475	4700	0.450	0.88	130
-565	5600	0.500	0.88	175
-685	6800	0.600	0.88	220
-825	8200	0.750	0.88	230
-106	10000	0.800	0.70	250
-126	12000	0.900	0.70	300
-156	15000	1.00	0.70	350
-186	18000	1.30	0.55	425
-226	22000	1.50	0.55	475
-276	27000	1.80	0.44	550
-336	33000	2.20	0.44	650
-396	39000	2.60	0.44	800
-476	47000	3.00	0.44	900
-566	56000	4.00	0.35	1100
-686	68000	5.00	0.27	1300
-826	82000	5.50	0.27	1800
-107	100000	6.40	0.27	2100
-127	120000	7.80	0.22	2600
-157	150000	9.00	0.22	3000

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

PC Mount Common Mode Chokes



Physical Parameters

	Inches	Millimeters
A	0.740 ± 0.025	18.8 ± 0.64
B	0.840 ± 0.025	21.3 ± 0.64
C	0.670 ± 0.025	17.0 ± 0.64
D	0.900 Ref.	22.9 ± 0.64
E	0.040 ± 0.025	1.0 ± 0.64
F	0.025 Sq. (Typ.)	0.64 Sq. (Typ.)
G	0.200 ± 0.010	5.1 ± 0.3
H	0.175 ± 0.010	4.4 ± 0.3
J	0.750 ± 0.025	19.1 ± 0.64
K	0.200 ± 0.010	5.1 ± 0.3
L	0.515 ± 0.010	13.1 ± 0.3

All dimensions are typical

Operating Temperature Range -55°C to +125°C

Current Rating at 80°C Ambient 40°C rise

Mechanical Configuration Tape wrapped winding sections; varnish impregnated assembly.

- Notes**
- 1) Inductance in table is for either L1 or L2.
 - 2) Leakage Inductance tested at L1 with L2 shorted or at L2 with L1 shorted.
 - 3) Windings balanced within 1%.

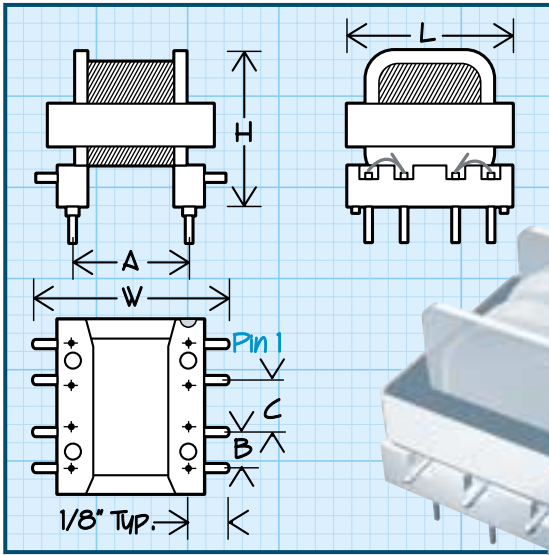
Packaging Bulk only

DASH NUMBER*	L (µH) L1 or L2 @ 1kHz ± 25%	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (AMPS)	LEAKAGE IND. MAXIMUM (µH)
-473	47	0.016	3.5	4.0
-563	56	0.018	3.5	4.0
-683	68	0.019	3.5	5.0
-823	82	0.023	2.8	5.5
-104	100	0.025	2.8	6.0
-124	120	0.028	2.8	6.5
-154	150	0.030	2.8	7.5
-184	180	0.038	2.2	8.0
-224	220	0.044	2.2	9.0
-274	270	0.051	2.2	10
-334	330	0.058	1.7	11
-474	470	0.078	1.4	16
-564	560	0.091	1.4	18
-684	680	0.115	1.1	20
-824	820	0.131	1.1	25
-105	1000	0.194	0.88	35
-125	1200	0.219	0.88	47
-155	1500	0.278	0.70	49
-185	1800	0.306	0.70	59
-225	2200	0.431	0.55	76
-275	2700	0.469	0.55	91
-335	3300	0.531	0.55	101
-395	3900	0.669	0.44	135
-475	4700	0.760	0.44	158
-565	5600	0.853	0.44	196
-685	6800	1.24	0.35	257
-825	8200	1.40	0.35	296
-106	10000	1.61	0.35	362
-126	12000	1.98	0.27	410
-156	15000	2.24	0.27	503
-186	18000	2.45	0.27	602
-226	22000	3.49	0.22	730
-276	27000	4.60	0.17	870
-336	33000	5.21	0.17	1150
-396	39000	7.19	0.13	1300
-476	47000	7.80	0.13	1541
-566	56000	8.69	0.13	1875
-686	68000	9.69	0.13	2254
-826	82000	13.10	0.10	2702
-107	100000	14.60	0.10	3269
-127	120000	16.00	0.10	3456

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

Switchmode Transformers on Ferrite E Cores



Power Ranges up to 500 Watts

Frequency Range 10KHz-250 KHz

UL Approved Class 130°C Insulation System

Standardized Components Fast Samples/Delivery

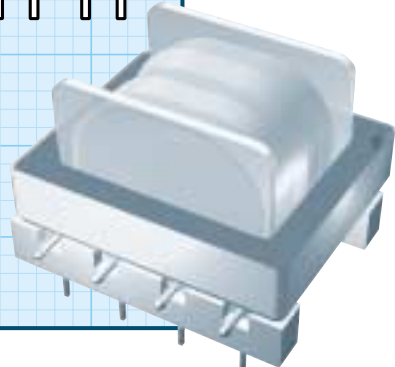
Easy Printed Circuit Board Insertion

Uses "Standard" E cores

UnGapped as well as Gapped Available

Suitable for use in all types of switching power supply circuits including:

- ▶ Flyback
- ▶ Forward
- ▶ Pushpull
- ▶ Halfbridge
- ▶ Fullbridge



Physical Parameters

	L	W	H	A	B	C	# of Pins	AI Ungapped	AI Gapped
6655-XX	0.750	0.868	0.625	0.510	0.150	0.200	8	1450	105
6656-XX	1.030	1.046	0.797	0.660	0.150	0.200	10	2100	152
6657-XX	1.470	1.279	1.000	0.860	0.150	0.200	12	3230	234
6658-XX	1.620	1.359	1.130	0.950	0.200	0.250	12	5400	391

Design Form (General): Photocopy, fill out and fax for fast response

Type

- Flyback
- Forward
- PushPull
- HalfBridge
- FullBridge
- UnGapped
- Gapped

Size

- 6655
- 6656
- 6657
- 6658

Special Features

- Kool Mu Core
- Faraday Shield

Frequency Range _____ to _____ Hz Continuous Discontinuous

Power _____ Watts (Continuous) Duty Cycle _____

Input Voltage _____ Min. / _____ Max. Number of Output Voltages _____

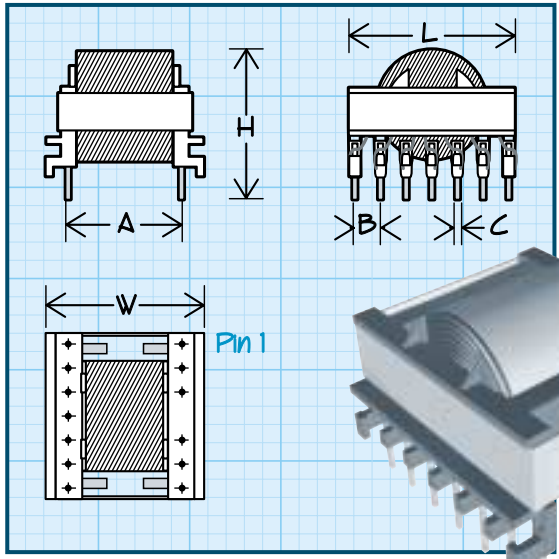
	Output 1	Output 2	Output 3	Output 4
Voltage	_____	_____	_____	_____
Current	_____	_____	_____	_____
Inductance	_____	_____	_____	_____
DCR	_____	_____	_____	_____

Dielectric Withstand Voltage _____ Operating Temperature _____ @ _____

Construction Specifications (If Applicable):

Winding #	1	2	3	4
Winding Description	_____	_____	_____	_____
Total Turns	_____	_____	_____	_____
Tap Turns	_____	_____	_____	_____
Wire Size	_____	_____	_____	_____
Wire Type	_____	_____	_____	_____
Start Pin	_____	_____	_____	_____
Finish Pin	_____	_____	_____	_____

Switchmode Transformers on Ferrite ETD Cores



Power Ranges up to 500 Watts
Frequency Range 10KHz-250 KHz
UL Approved Class 130°C Insulation System
Standardized Components Fast Samples/Delivery
Easy Printed Circuit Board Insertion

Uses "Standard" ETD cores
 UnGapped as well as Gapped Available
 Suitable for use in all types of switching power supply circuits including:

- ▶ Flyback
- ▶ Forward
- ▶ Pushpull
- ▶ Halfbridge
- ▶ Fullbridge

Physical Parameters

	L	W	H	A	B	# of Pins	C (Square)
6665-XX	1.390	1.390	0.950	1.000	0.200	13	0.028
6666-XX	1.679	1.685	1.375	1.000	0.200	14	0.039
6667-XX	1.876	1.882	1.480	1.200	0.200	16	0.039
6668-XX	2.061	2.055	1.590	1.400	0.200	18	0.039

Design Form (General): Photocopy, fill out and fax for fast response

Type Flyback Forward PushPull HalfBridge FullBridge UnGapped Gapped

Size 6665 6666 6667 6668

Frequency Range _____ to _____ Hz Continuous Discontinuous

Power _____ Watts (Continuous) Duty Cycle _____

Input Voltage _____ Min. / _____ Max. Number of Output Voltages _____

	Output 1	Output 2	Output 3	Output 4
Voltage	_____	_____	_____	_____
Current	_____	_____	_____	_____
Inductance	_____	_____	_____	_____
DCR	_____	_____	_____	_____

Dielectric Withstand Voltage _____ Operating Temperature _____ @ _____

Construction Specifications (If Applicable):

Winding #	1	2	3	4
Winding Description	_____	_____	_____	_____
Total Turns	_____	_____	_____	_____
Tap Turns	_____	_____	_____	_____
Wire Size	_____	_____	_____	_____
Wire Type	_____	_____	_____	_____
Start Pin	_____	_____	_____	_____
Finish Pin	_____	_____	_____	_____

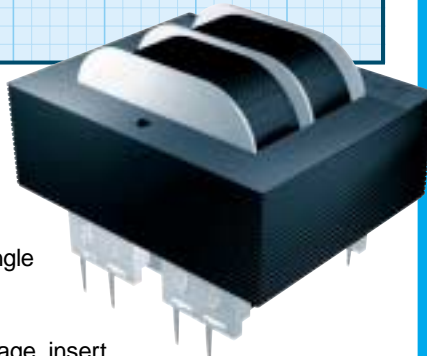
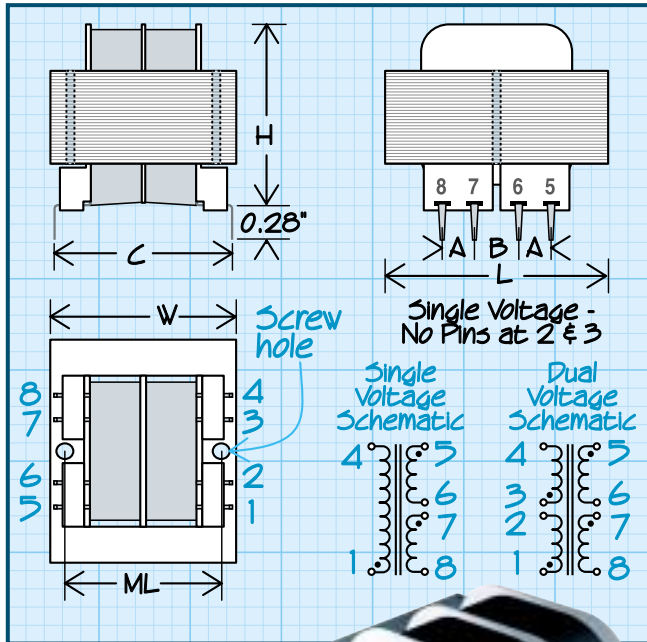
TRANSFORMERS

Series

6012R-6017R & 6022R-6027R 6012-6017 & 6022-6027

Traditional
First Quality

Horizontal PC Power Transformers



UL Certified
Recognized component
Underwriters Labs, Inc.

CSA Labeled

Primary Voltage
Series 6012 - 6017 115 Single
Series 6022 - 6027 115 -
230 Dual

To Order For Single Voltage, insert numeral 1 for "x" in Part Number listed in tables; for Dual Voltage, insert numeral 2 for "x" in Part Number listed in tables.

Operating Frequency 50/60 Hz

Operating Temperature 130° C

2500 V RMS Hipot

Split bobbin non-concentric winding

Dots on schematic indicate like polarity

Note Series 6017 and 6027 - 4 mounting holes
2 3/16 in. x 1 3/4 in. for #6 screw

***Complete part # must include series # PLUS the dash #**

For further surface finish information,
refer to TECHNICAL section of this catalog.

PART NUMBER*
VA
SECONDARY VOLTAGE SERIES CONNECTION
SECONDARY VOLTAGE PARALLEL CONNECTION
SECONDARY CURRENT SERIES CONNECTION
SECONDARY CURRENT PARALLEL CONNECTION

60x2-010	1.1	10.0	5.0	0.110	0.220
60x2-012	1.1	12.6	6.3	0.090	0.180
60x2-016	1.1	16.0	8.0	0.070	0.140
60x2-020	1.1	20.0	10.0	0.055	0.110
60x2-024	1.1	24.0	12.0	0.045	0.090
60x2-028	1.1	28.0	14.0	0.040	0.080
60x2-036	1.1	36.0	18.0	0.030	0.060
60x2-048	1.1	48.0	24.0	0.023	0.046
60x2-056	1.1	56.0	28.0	0.020	0.040
60x2-120	1.1	120.	60.0	0.010	0.020
60x3-010	2.4	10.0	5.0	0.250	0.500
60x3-012	2.4	12.6	6.3	0.200	0.400
60x3-016	2.4	16.0	8.0	0.150	0.300
60x3-020	2.4	20.0	10.0	0.120	0.240
60x3-024	2.4	24.0	12.0	0.100	0.200
60x3-028	2.4	28.0	14.0	0.085	0.170
60x3-036	2.4	36.0	18.0	0.065	0.130
60x3-048	2.4	48.0	24.0	0.050	0.100
60x3-056	2.4	56.0	28.0	0.045	0.090
60x3-120	2.4	120.	60.0	0.020	0.040
60x4-010	6.0	10.0	5.0	0.600	1.200
60x4-012	6.0	12.6	6.3	0.500	1.000
60x4-016	6.0	16.0	8.0	0.400	0.800
60x4-020	6.0	20.0	10.0	0.300	0.600
60x4-024	6.0	24.0	12.0	0.250	0.500
60x4-028	6.0	28.0	14.0	0.200	0.400
60x4-036	6.0	36.0	18.0	0.170	0.340
60x4-048	6.0	48.0	24.0	0.125	0.250
60x4-056	6.0	56.0	28.0	0.110	0.220
60x4-120	6.0	120.	60.0	0.050	0.100
60x5-010	12.	10.0	5.0	1.200	2.400
60x5-012	12.	12.6	6.3	1.000	2.000
60x5-016	12.	16.0	8.0	0.800	1.600
60x5-020	12.	20.0	10.0	0.600	1.200
60x5-024	12.	24.0	12.0	0.500	1.000
60x5-028	12.	28.0	14.0	0.420	0.840
60x5-036	12.	36.0	18.0	0.350	0.700
60x5-048	12.	48.0	24.0	0.250	0.500
60x5-056	12.	56.0	28.0	0.220	0.440
60x5-120	12.	120.	60.0	0.100	0.200
60x6-010	20.	10.0	5.0	2.000	4.000
60x6-012	20.	12.6	6.3	1.600	3.200
60x6-016	20.	16.0	8.0	1.250	2.500
60x6-020	20.	20.0	10.0	1.000	2.000
60x6-024	20.	24.0	12.0	0.800	1.600
60x6-028	20.	28.0	14.0	0.700	1.400
60x6-036	20.	36.0	18.0	0.550	1.100
60x6-048	20.	48.0	24.0	0.400	0.800
60x6-056	20.	56.0	28.0	0.350	0.700
60x6-120	20.	120.	60.0	0.160	0.320
60x7-010	36.	10.0	5.0	3.600	7.200
60x7-012	36.	12.6	6.3	2.850	5.700
60x7-016	36.	16.0	8.0	2.250	4.500
60x7-020	36.	20.0	10.0	1.800	3.600
60x7-024	36.	24.0	12.0	1.500	3.000
60x7-028	36.	28.0	14.0	1.300	2.600
60x7-036	36.	36.0	18.0	1.000	2.000
60x7-048	36.	48.0	24.0	0.750	1.500
60x7-056	36.	56.0	28.0	0.650	1.300
60x7-120	36.	120.	60.0	0.300	0.600

Physical Parameters & Mounting Information

	L		W		H		A		B		C		ML		Screw Size	Weight	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		lbs.	grams
60x2	1.38	34.93	1.13	28.58	0.94	23.81	0.25	6.35	0.25	6.35	1.20	30.48	—	—	none	0.17	77
60x3	1.38	34.93	1.13	28.58	1.19	30.16	0.25	6.35	0.25	6.35	1.20	30.48	—	—	none	0.25	113
60x4	1.63	41.28	1.31	33.34	1.31	33.34	0.25	6.35	0.35	8.89	1.28	32.51	1.06	26.99	4-40	0.44	200
60x5	1.88	47.63	1.56	39.69	1.44	36.51	0.30	7.62	0.40	10.16	1.41	35.81	1.25	31.75	4-40	0.70	317
60x6	2.25	57.15	1.88	47.63	1.44	36.51	0.30	7.62	0.40	10.16	1.60	40.64	1.50	38.10	4-40	0.80	363
60x7	2.63	66.68	2.19	55.56	1.56	39.69	0.40	10.16	0.40	10.16	1.85	46.99	—	—	—	1.10	499

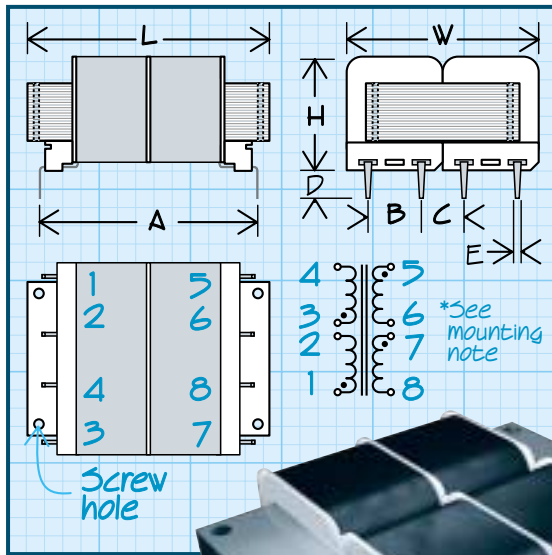
TRANSFORMERS

Series

6051R – 6055R
6051 – 6055



Low Profile PC Power Transformers



UL Certified

Recognized component
Underwriters Labs, Inc.

CSA Labeled

Primary Voltage 115/230 V

Operating Frequency 50/60 Hz

Operating Temperature 130° C

1500 V RMS Hipot

Split bobbin non-concentric winding

Dots on schematic indicate like polarity

Mounting Note

Series 6051, 6052 and 6053 – 4 mounting holes

2 3/16 in. x 1 3/4 in. for #6 screw

Series 6054 and 6055 – 2 mounting holes

*See mechanical drawing for correct PCB footprint.

***Complete part # must include series # PLUS the dash #**

For further surface finish information,
refer to TECHNICAL section of this catalog.

PART NUMBER*

VA

SECONDARY VOLTAGE
SERIES CONNECTION (V)

SECONDARY VOLTAGE
PARALLEL CONNECTION (V)

SECONDARY CURRENT
SERIES CONNECTION (A)

SECONDARY CURRENT
PARALLEL CONNECTION (A)

6051-010	2.5	10.0	5.0	0.250	0.500
6051-012	2.5	12.6	6.3	0.200	0.400
6051-016	2.5	16.0	8.0	0.156	0.312
6051-020	2.5	20.0	10.0	0.125	0.250
6051-024	2.5	24.0	12.0	0.104	0.208
6051-034	2.5	34.0	17.0	0.073	0.146
6051-040	2.5	40.0	20.0	0.062	0.124
6051-056	2.5	56.0	28.0	0.044	0.088
6051-088	2.5	88.0	44.0	0.028	0.056
6051-120	2.5	120.	60.0	0.020	0.040
6051-230	2.5	230.	115.	0.010	0.020
6052-010	6.0	10.0	5.0	0.600	1.200
6052-012	6.0	12.6	6.3	0.450	0.900
6052-016	6.0	16.0	8.0	0.350	0.700
6052-020	6.0	20.0	10.0	0.300	0.600
6052-024	6.0	24.0	12.0	0.250	0.500
6052-034	6.0	34.0	17.0	0.170	0.340
6052-040	6.0	40.0	20.0	0.150	0.300
6052-056	6.0	56.0	28.0	0.100	0.200
6052-088	6.0	88.0	44.0	0.065	0.130
6052-120	6.0	120.	60.0	0.050	0.100
6052-230	6.0	230.	115.	0.025	0.050
6053-010	12.0	10.0	5.0	1.200	2.400
6053-012	12.0	12.6	6.3	0.900	1.800
6053-016	12.0	16.0	8.0	0.700	1.400
6053-020	12.0	20.0	10.0	0.600	1.200
6053-024	12.0	24.0	12.0	0.500	1.000
6053-034	12.0	34.0	17.0	0.340	0.680
6053-040	12.0	40.0	20.0	0.300	0.600
6053-056	12.0	56.0	28.0	0.200	0.400
6053-088	12.0	88.0	44.0	0.130	0.260
6053-120	12.0	120.	60.0	0.100	0.200
6053-230	12.0	230.	115.	0.050	0.100
6054-010	24.0	10.0	5.0	2.400	4.800
6054-012	24.0	12.6	6.3	1.900	3.800
6054-016	24.0	16.0	8.0	1.500	3.000
6054-020	24.0	20.0	10.0	1.200	2.400
6054-024	24.0	24.0	12.0	1.000	2.000
6054-030	24.0	30.0	15.0	0.800	1.600
6054-034	24.0	34.0	17.0	0.700	1.400
6054-040	24.0	40.0	20.0	0.600	1.200
6054-056	24.0	56.0	28.0	0.425	0.850
6054-088	24.0	88.0	44.0	0.275	0.550
6054-120	24.0	120.	60.0	0.200	0.400
6054-230	24.0	230.	115.	0.100	0.200
6055-010	48.0	10.0	5.0	4.800	9.600
6055-012	48.0	12.6	6.3	3.800	7.600
6055-016	48.0	16.0	8.0	3.000	6.000
6055-020	48.0	20.0	10.0	2.400	4.800
6055-024	48.0	24.0	12.0	2.000	4.000
6055-030	48.0	30.0	15.0	1.600	3.200
6055-034	48.0	34.0	17.0	1.400	2.800
6055-040	48.0	40.0	20.0	1.200	2.400
6055-056	48.0	56.0	28.0	0.850	1.700
6055-088	48.0	88.0	44.0	0.550	1.100
6055-120	48.0	120.	60.0	0.400	0.800
6055-230	48.0	230.	115.	0.200	0.400

TRANSFORMERS

Physical Parameters & Mounting Information

	L		W		H		A		B		C		D		E		Weight	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	oz.	kg
6051	1.88	47.62	1.56	39.68	0.65	16.50	1.60	40.63	0.38	9.53			0.25	6.35	0.041	1.04	5	.142
6052	1.88	47.62	1.56	39.68	0.85	21.59	1.60	40.63	0.38	9.53			0.25	6.35	0.041	1.04	7	.219
6053	2.50	63.49	2.00	50.80	1.07	27.05	2.00	50.79	0.50	12.69			0.25	6.35	0.041	1.04	11	.312
6054	2.88	73.02	2.25	57.15	1.25	31.74	1.90	48.26	0.60	15.24	0.53	13.46	0.25	6.35	0.041	1.04	15	.426
6055	3.13	79.37	2.50	63.50	1.38	34.92	2.18	55.37	0.60	15.24	0.66	16.76	0.25	6.35	0.041	1.04	21	.596

Series

6443R-6448R
6443-6448

RoHS
Compliant

Traditional
First Quality

VDE PC Mount Transformers

PART NUMBER*

VA

PRIMARY
VOLTAGE

SERIES
CONNECTION

PARALLEL
CONNECTION

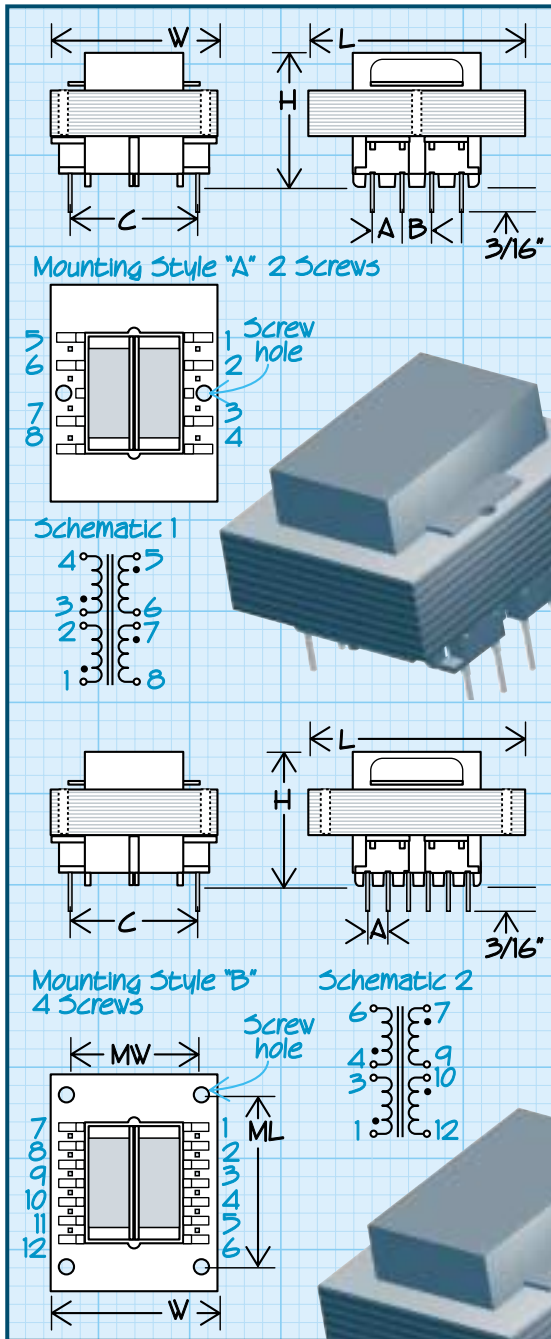
SECONDARY
VOLTAGE

SECONDARY
CURRENT

PARALLEL
CONNECTION

SCHEMATIC

Mounting Style



6443-010	2.5	115/230	10.0	5.0	0.250	0.50	1	A
6443-012	2.5	115/230	12.6	6.3	0.200	0.40	1	A
6443-016	2.5	115/230	16.0	8.0	0.150	0.30	1	A
6443-020	2.5	115/230	20.0	10.0	0.120	0.24	1	A
6443-024	2.5	115/230	24.0	12.0	0.100	0.20	1	A
6443-028	2.5	115/230	28.0	14.0	0.090	0.18	1	A
6443-036	2.5	115/230	36.0	18.0	0.070	0.14	1	A
6444-010	5	115/230	10.0	5.0	0.500	1.00	1	A
6444-012	5	115/230	12.6	6.3	0.400	0.80	1	A
6444-016	5	115/230	16.0	8.0	0.310	0.62	1	A
6444-020	5	115/230	20.0	10.0	0.250	0.50	1	A
6444-024	5	115/230	24.0	12.0	0.210	0.42	1	A
6444-028	5	115/230	28.0	14.0	0.180	0.36	1	A
6444-036	5	115/230	36.0	18.0	0.140	0.28	1	A
6445-010	10	115/230	10.0	5.0	1.000	2.00	1	A
6445-012	10	115/230	12.6	6.3	0.800	1.60	1	A
6445-016	10	115/230	16.0	8.0	0.620	1.25	1	A
6445-020	10	115/230	20.0	10.0	0.500	1.00	1	A
6445-024	10	115/230	24.0	12.0	0.420	0.84	1	A
6445-028	10	115/230	28.0	14.0	0.360	0.73	1	A
6445-036	10	115/230	36.0	18.0	0.280	0.56	1	A
6446-010	20	115/230	10.0	5.0	2.000	4.00	2	A
6446-012	20	115/230	12.6	6.3	1.600	3.30	2	A
6446-016	20	115/230	16.0	8.0	1.250	2.50	2	A
6446-020	20	115/230	20.0	10.0	1.000	2.00	2	A
6446-024	20	115/230	24.0	12.0	0.830	1.66	2	A
6446-028	20	115/230	28.0	14.0	0.720	1.44	2	A
6446-036	20	115/230	36.0	18.0	0.560	1.12	2	A
6447-010	30	115/230	10.0	5.0	3.000	6.00	2	B
6447-012	30	115/230	12.6	6.3	2.400	4.80	2	B
6447-016	30	115/230	16.0	8.0	1.900	3.80	2	B
6447-020	30	115/230	20.0	10.0	1.500	3.00	2	B
6447-024	30	115/230	24.0	12.0	1.250	2.50	2	B
6447-028	30	115/230	28.0	14.0	1.060	2.12	2	B
6447-036	30	115/230	36.0	18.0	0.820	1.64	2	B
6448-010	56	115/230	10.0	5.0	5.600	11.20	2	B
6448-012	56	115/230	12.6	6.3	4.400	8.80	2	B
6448-016	56	115/230	16.0	8.0	3.500	7.00	2	B
6448-020	56	115/230	20.0	10.0	2.800	5.60	2	B
6448-024	56	115/230	24.0	12.0	2.330	4.66	2	B
6448-028	56	115/230	28.0	14.0	2.000	4.00	2	B
6448-036	56	115/230	36.0	18.0	1.560	3.12	2	B

*Complete part # must include series # PLUS the dash #

For further surface finish information, refer to TECHNICAL section of this catalog.

UL Certified Recognized component Underwriters Labs, Inc.®; CSA Labeled

Primary Voltage Available in either 115V or dual 115/230V

Operating Frequency 50/60 Hz

Operating Temperature 130°C

4000 V RMS Hipot

Split bobbin non-concentric winding

Designed to pass VDE creepage distance

Note Dots on schematic indicate like polarity

Physical Parameters & Mounting Information

	L		W		H		A		B		C		Pin width (sq.)		MW		ML		Weight		Screw size	# Terminals
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	grams				
6443	1.63	41.40	1.44	36.58	1.13	28.70	0.20	5.08	0.25	6.35	1.00	25.40	0.025	0.63	1.06	26.92	—	—	0.25	113	4	8
6444	1.63	41.40	1.44	36.58	1.38	35.05	0.20	5.08	0.40	10.16	1.00	25.40	0.025	0.63	1.06	26.92	—	—	0.37	167	4	8
6445	1.88	47.75	1.56	39.62	1.38	35.05	0.20	5.08	0.40	10.16	1.14	28.96	0.036	0.91	1.25	31.75	—	—	0.53	240	4	8
6446	2.25	57.15	1.88	47.75	1.63	41.40	0.40	10.16	0.40	10.16	1.46	37.08	0.036	0.91	1.50	38.10	—	—	0.90	408	4	12
6447	2.63	66.80	2.19	55.63	1.56	39.62	0.28	7.11	—	—	1.68	42.67	0.045	1.14	1.75	44.45	2.19	55.63	1.15	521	6	12
6448	3.00	76.20	2.50	63.50	1.81	45.97	0.30	7.62	—	—	1.90	48.26	0.045	1.14	2.00	50.80	2.50	63.50	1.70	771	6	12

TRANSFORMERS

Series

6494R-6498R
6494-6498

RoHS
Compliant

Traditional
First Quality

VDE Quick-Connect Transformers

PART NUMBER*

VA

PRIMARY
VOLTAGE

SERIES
CONNECTION

PARALLEL
CONNECTION

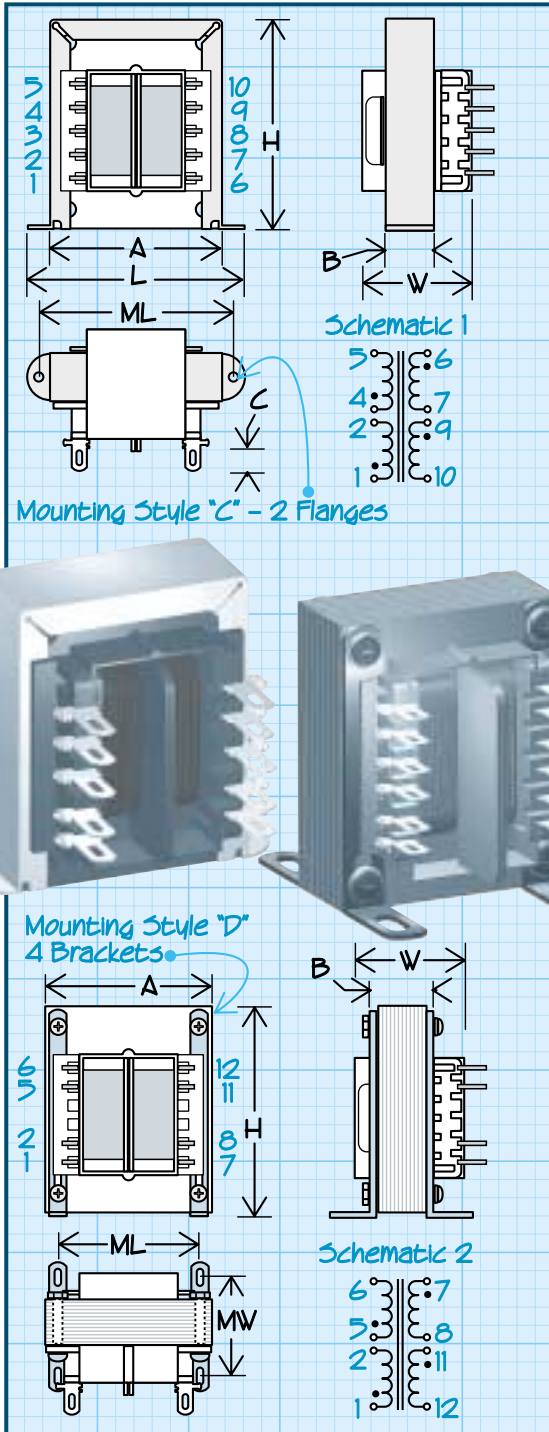
SERIES
CONNECTION

PARALLEL
CONNECTION

SCHEMATIC

SECONDARY
VOLTAGE

SECONDARY
CURRENT



6494-010	25	115/130	10.0	5.0	2.50	5.00	1	C
6494-012	25	115/230	12.6	6.3	2.00	4.00	1	C
6494-016	25	115/230	16.0	8.0	1.60	3.20	1	C
6494-020	25	115/230	20.0	10.0	1.25	2.50	1	C
6494-024	25	115/230	24.0	12.0	1.00	2.00	1	C
6494-028	25	115/230	28.0	14.0	0.90	1.86	1	C
6494-036	25	115/230	36.0	18.0	0.70	1.40	1	C
6494-230	25	115/230	230.0	115.0	0.11	0.22	1	C
6495-010	43	115/230	10.0	5.0	4.30	8.60	1	C
6495-012	43	115/230	12.6	6.3	3.40	6.80	1	C
6495-016	43	115/230	16.0	8.0	2.70	5.40	1	C
6495-020	43	115/230	20.0	10.0	2.20	4.40	1	C
6495-024	43	115/230	24.0	12.0	1.80	3.60	1	C
6495-028	43	115/230	28.0	14.0	1.50	3.00	1	C
6495-036	43	115/230	36.0	18.0	1.20	2.40	1	C
6495-230	43	115/230	230.0	115.0	0.19	0.38	1	C
6496-010	80	115/230	10.0	5.0	8.00	16.00	2	D
6496-012	80	115/230	12.6	6.3	6.30	12.60	2	D
6496-016	80	115/230	16.0	8.0	5.00	10.00	2	D
6496-020	80	115/230	20.0	10.0	4.00	8.00	2	D
6496-024	80	115/230	24.0	12.0	3.30	6.60	2	D
6496-028	80	115/230	28.0	14.0	2.80	5.60	2	D
6496-036	80	115/230	36.0	18.0	2.20	4.40	2	D
6496-230	80	115/230	230.0	115.0	0.35	0.70	2	D
6497-010	130	115/230	10.0	5.0	13.00	26.00	2	D
6497-012	130	115/230	12.6	6.3	10.30	20.60	2	D
6497-016	130	115/230	16.0	8.0	8.10	16.20	2	D
6497-020	130	115/230	20.0	10.0	6.50	13.00	2	D
6497-024	130	115/230	24.0	12.0	5.40	10.80	2	D
6497-028	130	115/230	28.0	14.0	4.60	9.20	2	D
6497-036	130	115/230	36.0	18.0	3.60	7.20	2	D
6497-230	130	115/230	230.0	115.0	0.57	1.14	2	D
6498-010	175	115/230	10.0	5.0	17.50	35.00	2	D
6498-012	175	115/230	12.6	6.3	14.00	28.00	2	D
6498-016	175	115/230	16.0	8.0	11.00	22.00	2	D
6498-020	175	115/230	20.0	10.0	8.80	17.60	2	D
6498-024	175	115/230	24.0	12.0	7.30	14.60	2	D
6498-028	175	115/230	28.0	14.0	6.25	12.50	2	D
6498-036	175	115/230	36.0	18.0	4.80	9.60	2	D
6498-230	175	115/230	230.0	115.0	0.76	1.52	2	D

*Complete part # must include series # PLUS the dash #

For further surface finish information,
refer to TECHNICAL section of this catalog.

UL Certified Recognized component Underwriters
Labs, Inc®; CSA Labeled

Primary Voltage Available in either 115V or dual 115/230V

Operating Frequency 50/60 Hz

Operating Temperature 130°C

4000 V RMS Hipot

Split bobbin non-concentric winding

Designed to pass VDE creepage distance

Note Dots on schematic indicate like polarity

Physical Parameters & Mounting Information

	L		W		H		A		B		C		Pin width (sq.)		MW		ML		Weight		Screw size	# Terminals
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg		
6494	2.81	71.44	1.88	47.63	2.31	58.74	2.00	50.80	1.13	28.58	0.31	7.94	0.19	4.763	—	—	2.38	60.33	1.25	0.567	6	10
6495	3.13	79.38	2.06	52.39	2.69	68.26	2.25	57.15	1.13	28.58	0.19	4.76	0.81	20.64	—	—	2.81	71.44	1.60	0.726	6	10
6496	2.50	63.50	2.38	60.33	3.00	76.20	—	—	1.38	34.93	0.31	7.94	0.19	4.763	2.19	55.56	2.00	50.80	2.80	1.270	6	12
6497	2.81	71.44	2.88	73.03	3.38	85.73	—	—	1.63	41.28	0.38	9.53	0.25	6.350	2.50	63.50	2.25	57.15	4.10	1.860	8	12
6498	3.13	79.38	2.88	73.03	3.75	95.25	—	—	1.63	41.28	0.38	9.53	0.25	6.350	2.50	63.50	2.50	63.50	5.50	2.494	8	12

Custom Designed

Air Cores



Specifications:

Wire Gauges 8 to 30*

Wire Types Bare Copper; Tinned Copper; Single or Heavy Insulation; High Temperature

Coatings Seal-brite (Standard); Solder Coated (Optional) - (42% Tin, 48% Bismuth)-Std.

Turns 1/2 to 50

Inside Diameter 0.040" to 1.500"

Lead Length 0.000" to 2.500"

Pitch (Space-Wound) 0.000" to .250"

Strip Length 0.020" to 1.000"

*Consult Factory for Requirements Using 30 Gauge Wire

Standard Tolerances available on Major Parameters:

Specification	Tolerance
Lead Length from .001" to 2.500"	±0.025"
I.D. and O.D. from .001" to .100"	±0.002"
I.D. and O.D. from .101" and Up	±0.003"
Strip Length from .001" to 1.000"	±0.025"
Spread from .001" and Up	±0.025"
Overall from .001" and Up	±0.025"
Angles:	±5 Degrees

Note: Consult Factory for Parameters falling outside these ranges.

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Sketch Exact Requirements

Turns _____

Wire Gauge _____

Insulation _____

Lead Length _____

Strip Length: _____

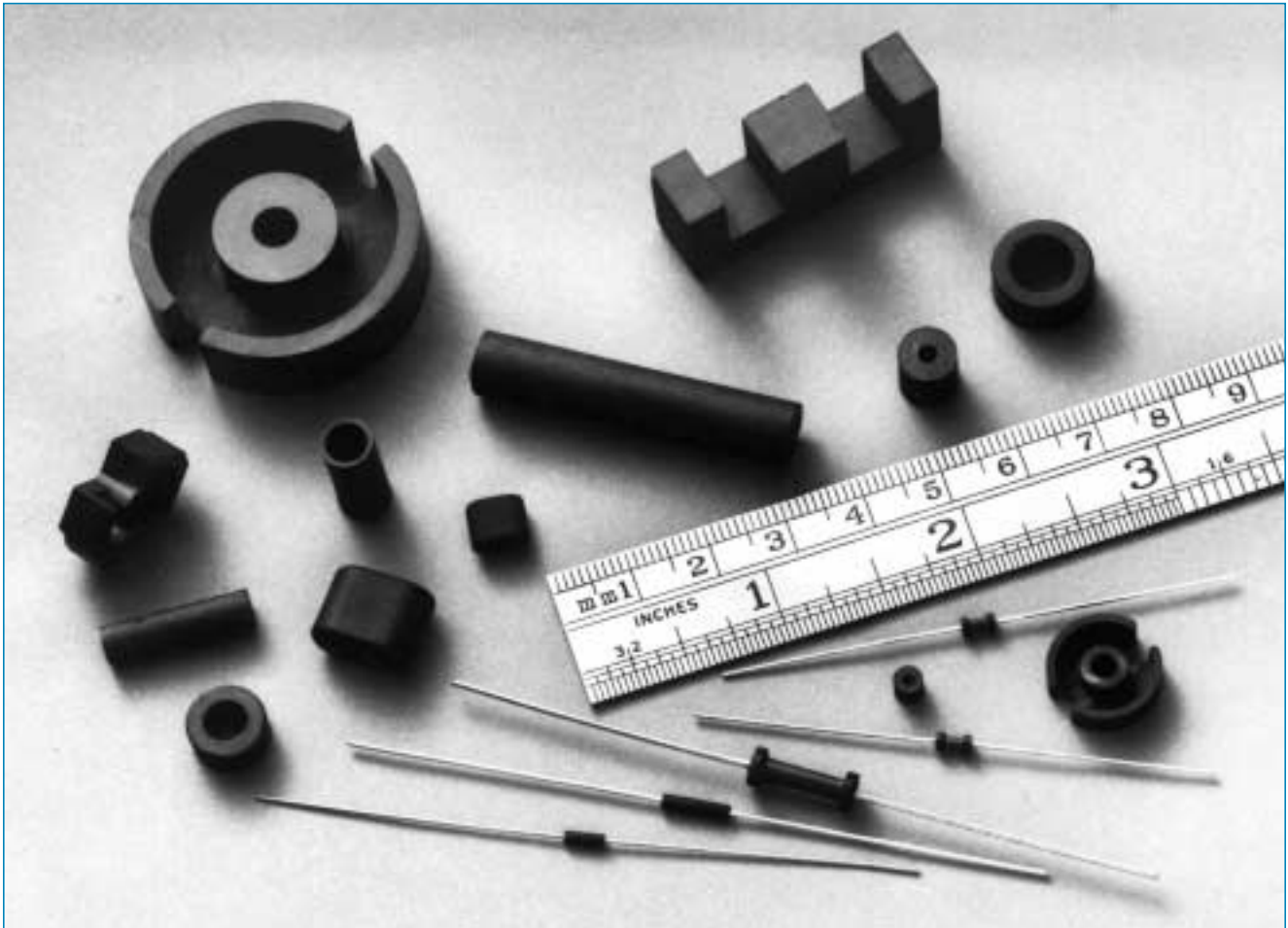
Inside Diameter: _____

Solder/Seal-Brite: _____

Pitch: _____

Custom

Ferrite Cores



API Delevan now offers fast delivery of high-quality, reasonably-priced custom ferrite cores. Samples are always handled and submitted as quickly as possible. Tooling-up time for small cores normally takes less than six weeks. Send us your requirements today and we'll promptly meet your design needs with affordably-priced products.

MAIN PRODUCT LINES:

RM Cores	Cup Cores	Pot Cores	Bobbin Cores	PC Cores	Ferrite Beads
EE Cores	Coil Forms	EI Cores	Ferrite Rods	UU Cores	SMD Beads
ETD Cores	Drum Cores	Toroid Cores	RH Cores	Antenna Cores	Sleeves

AC FLUX DENSITY (GAUSS) Number of flux lines per unit of cross-sectional area generated by an alternating magnetic field.

AMPERE TURNS (NI) the product of current (I) flowing in the winding times the number of turns (N).

B-H CURVE Curve to show characteristics of a magnetic material, in terms of magnetizing force (H) and resulting flux density.

COPPER LOSS (WATTS) The power absorbed by a coil subjected to an alternating current.

CORE Magnetic material placed within and around a coil to provide a path of lower reluctance for magnetic flux.

CORE LOSS Sum of hysteresis and eddy-current loss in a magnetic core.

CURRENT RATING (Idc) is the maximum recommended DC current for the inductor. Expressed in milliamps (mA) or amps (A) maximum. This is limited by the allowable temperature rise.

DCR is the direct current (DC) resistance offered by an inductor due to the resistance of the magnet wire used to wind. Expressed in ohms or milliohms maximum. This is an undesirable characteristic, which is a byproduct of the wire or conductive material used. The lower the DCR, the more current an inductor will handle.

FLUX Product of the average component of magnetic induction perpendicular to any given surface in a magnetic field by the area of that surface, expressed in webers.

FLYBACK TRANSFORMER Transformer used in a flyback power supply. Also called horizontal output transformer.

INCREMENTAL CURRENT (dl) is the amount of DC current which causes the inductor to lose a small percentage of its inductance (starting to saturate); only of concern on Shielded or High Current Inductors. Expressed in milliamps (mA) or amps (A). It is specified only when its value is less than the rated current.

INDUCTANCE The property of a circuit element that opposes changes in Alternating Current (AC). Expressed in millihenries (mH), microhenries (uH), or nanohenries (nH) and should carry a tolerance (i.e.±5% or ±10%). Inductance does vary as a function of frequency; the higher the frequency, the higher the inductance of a given device up to its SRF (self resonant frequency). As a rule, the inductance remains relatively constant past its Test Frequency.

INDUCTORS are electrical components that oppose any change of AC current by means of storing energy in a magnetic field.

INITIAL PERMEABILITY (NO) Permeability = $\mu = B/H$
Initial permeability is that value of permeability when $B_{ac} = 10\text{gs}$.

IRON-CORE COIL/ TRANSFORMER Coil/transformer wound around an iron core to increase its inductance. At audio frequencies the iron core consists of laminations of silicon steel insulated from each other by varnish or shellac. At radio frequencies the core consists of powdered iron mixed in a binder which insulates the particles from each other.

ISOLATION TRANSFORMER Transformer with a one-to-one turns ratio, connected between the a.c. power input to a piece of equipment and the a.c. line, to minimize shock hazard.

LOAD LOSS These losses are caused by the resistance of the windings under loaded conditions.

MAXIMUM POWER DISSIPATION An inductor's ability to handle the heat generated by operating at maximum current at an ambient temperature, expressed in Watts (W) or milliwatts (mW). This is a function of the body area of the inductor, core material used, and varies for shielded vs. unshielded.

NO LOAD LOSS (CORE LOSSES) These losses are caused by the magnetizing of the core and are always present. The way they are measured is by running full voltage with no load on the transformer.

OPERATING TEMPERATURE RANGE specifies the temperature extremes at which the inductor will operate safely. At the maximum temperature specified, allowance must be made for the "Temperature Rise" created by heating effects of using the inductor at its maximum current rating. Normally, API uses 90 degrees Celsius as ambient temperature for rating current; thus 125 degrees operating minus 90 degrees ambient, allows 35 degrees for temperature rise.

PERMEABILITY (μ) By definition $\mu = B/H$, where B is the flux density in gauss and H is the magnetizing force in oersteds.

POWER TRANSFORMER Magnetic-core transformer for operation at 60 hertz, with nearly zero source impedance, to transfer power from line voltage to some required voltage.

PRIMARY WINDING The winding connected to the source of energy.

Q is Quality Factor of an Inductor relating to the amount of energy lost while an AC current is passing through it. It is expressed as a minimum value (i.e. 50 minimum). In most applications the higher the value of Q, the better the inductor will perform.

SRF is the inductor's self resonant frequency; the frequency at which the inductor looks electrically capacitive, rather than inductive. Expressed in megahertz (MHz) minimum. The higher the value, the greater the range of frequency use. An inductor should never be used at or beyond its SRF (Self Resonant Frequency).

SECONDARY WINDING The winding is the coil where energy is induced from the primary.

SHIELDED inductors have internal iron or ferrite around the entire winding to prevent unwanted signals from escaping and interfering with the other components in the immediate area.

STEP UP TRANSFORMER When the secondary is at a higher voltage than the primary.

STEP DOWN TRANSFORMER When the secondary has a lower voltage than the primary.

SATURATION Maximum density of magnetic flux that can be present in a magnetic material.

TEMPERATURE COEFFICIENT OF INDUCTANCE (T_c of L) is the value of inductance change as a function of temperature exposure, normally expressed in parts per million per degrees Celsius. This is a calculation comparing inductance at a reference temperature (25°C, room ambient) to the extremes and other temperatures within operating range. Can be called Percent Delta L or Temperature Stability; the lower the change the better for most applications.

TEST FREQUENCY is the industry/military standard for testing a range of inductances. It is not intended as the application frequency. Expressed in megahertz (MHz) or kilohertz (KHz).

TURN RATIO The ratio of the primary voltage (or turns) to the secondary voltage (or turns).

VOLT-AMPERE (VA) In an a.c. circuit, a measure of apparent power, given by: $VA = EI$, where E is the potential in volts; I is the current in amperes; and VA is apparent power in volt-amperes

Surface Mount Inductors

TESTING: MIL-PRF-83446, MIL-PRF-15305, and MIL-STD-202 are used as guidelines for type of test, method, and requirement. These specifications are employed as reference guidelines and may be adjusted, based on design, application, or market need. Consult the Sales Department for assistance concerning this important issue. All testing and methods for characterizing the inductive components are as performed by API Delevan. Further information is available for the details of specific tests. Copies of Government specifications are not available from API Delevan. For additional information contact your local Representative, or the API Delevan Sales Department.

TEST FIXTURES: Available through special order. The factory recommends test equipment correlation sampling when low inductance (0.10 μ H) and tight tolerance (2%) values are required.



PERFORMANCE TESTING

Test	Ref. Method	Requirement
Thermal Shock	MIL-STD-202, Method 107, Condition A2	Parts will be able to withstand 50 cycles of thermal shock with no evidence of failure.
Dielectric Withstanding Voltage	MIL-STD-202, Method 301	500 Vrms for 40 seconds. No evidence of breakdown
Barometric Pressure	MIL-STD-202, Method 105, Condition C	No evidence of breakdown. Test voltage: 200 Vrms.
Insulation Resistance	MIL-STD-202, Method 302, Condition A	1000 megohms minimum when tested from terminations to the component body.
Life Test	MIL-STD-202, Method 108	Test condition F
Solderability	MIL-STD-202, Method 208	95% coverage after immersing in type RMA flux, solder dip for five seconds @ 245°C \pm 5°C.
Temperature Rise Characteristics	MIL-PRF-83446 para. 3.15	No degradation to series electrical parameters
Overload	MIL-PRF-83446 para. 3.16	One and one-half times rated current for 5 minutes
Resistance to Solder Heat	MIL-STD-202, Method 210	Test condition B
Moisture Resistance	MIL-STD-202, Method 106	No load applied during test
Terminal Strength	MIL-STD-883, Method 2011	One kilogram force
Solvent Resistance	MIL-STD-202, Method 215	No damage after exposure to processing chemicals.

Technical Notes

Surface Mount Inductors

MARKING: Standard marking is either laser processing or imprinting. Each inductor will have manufacturer identifier, the inductance value (either by actual value or series dash number designation), and the date code of manufacture for traceability. See the catalog page for examples of the specific series printing. Optional marking is available on request. Micro-i's, Multilayer, Ferrite Beads, Variables, and Air-Coils are not marked due to construction or size limitations. Consult the Sales Department for your specific requirements.

PCB MOUNTING: All components are capable of being mounted by any standard means of assembly. Details can be obtained by consulting the API Delevan Engineering Department.

PACKAGING: Standard is bulk bagged or on "cut tape" for quantities under 500 pieces. Full reel quantities will be supplied on Tape & Reel per latest revision of EIA-RS-481. Series 3483 and S3483 conform to EIA #RC-1009B.

Tape & Reel Specifications for Catalog Parts

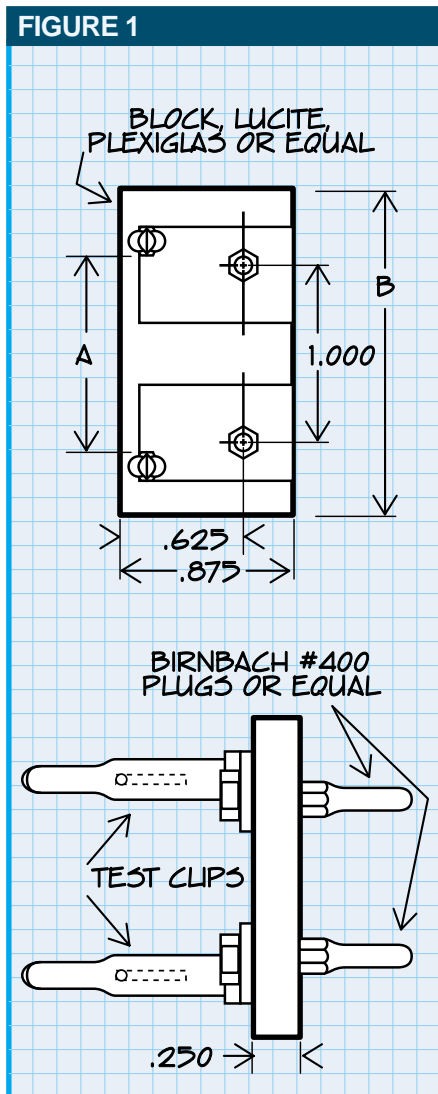
SERIES NUMBER	— MAXIMUM QUANTITY —		EMBOSSED CARRIER WIDTH
	PER 7" DIAMETER REEL	PER 13" DIAMETER REEL	
MICRO i® Devices			
100	Not Avail.	Not Avail.	---
103, 105, 108, 3090	2000	8000	8mm
3094, 4379	650	2500	12mm

Tape & Reel Specifications for Catalog Parts

SERIES NUMBER	— MAXIMUM QUANTITY —		EMBOSSED CARRIER WIDTH
	PER 7" DIAMETER REEL	PER 13" DIAMETER REEL	
SURFACE MOUNT Devices			
0402	4000	Not Avail.	8mm
1008, HF1008, S1008, 4302	2000	7000	8mm
WW1008	2000	Not Avail.	8mm
1210, S1210, 4232	2000	7000	8mm
1330, MIL1330, P1330	500	2200	16mm
1331, MIL1331	500	2200	16mm
0603, C1608	4000	Not Avail.	8mm
0805	2000	Not Avail.	8mm
1812, P1812, S1812, MIL1812, MILS1812	650	2500	12mm
C2012	3000	Not Avail.	8mm
2510, MIL2510, 2512	750	2700	12mm
3223	Not Avail.	1000	24mm
3483, S3483	Not Avail.	1000	16mm
4221-1 & -3	500	2500	12mm
4221-2 & -4	500	2500	16mm
4426-1 to -5	650	2500	12mm
4426-6 to -10	400	1400	16mm
4448, CM6460, CM6560	Not Avail.	350	24mm
4494, 4501, FW1405	Not Avail.	600	24mm
4922, S4924, 5022, 5526	Not Avail.	800	24mm
5142	Not Avail.	500	24mm
8532	Not Avail.	480	44mm
CM6149	Not Avail.	800	16mm
CM6350, CM6594	Not Avail.	600	24mm
EMI0805, EMI1206, EMI1210	2000	5000	8mm
EMI1806-XXX	2000	5000	12mm
EMI1812-XXX	1000	2500	12mm
PD43	Not Avail.	1500	12mm
PD54, PD73	Not Avail.	1000	16mm
PD75	Not Avail.	500	16mm
PD104	Not Avail.	1000	24mm
PD105	Not Avail.	500	24mm
SDS680	Not Avail.	2000	16mm
SDS850	Not Avail.	1000	16mm
SDS130	Not Avail.	1000	24mm
SMB 2.5	Not Avail.	700	24mm
SPD62	Not Avail.	1500	16mm
SPD73, SPD74	Not Avail.	1000	16mm
SPD125, SPD127	Not Avail.	500	24mm

Thru-Hole Inductors

FIGURE 1



TEST FIXTURES: Fixtures such as the axial leaded type shown in Figure 1 are available through special order.

Dimensions:

	Inches	Millimeters
Test Fixture A "A"	0.938	23.82
Test Fixture A "B"	2.0	50.80
Test Fixture B "A"	1.938	49.22
Test Fixture B "B"	3.0	76.20

Use Test Fixture A when body length is 0.563"/1.43mm or less.
 Use Test Fixture B when body length is greater than 0.563"/1.43mm



TESTING: Standard method for all inductors, unless stated on the series page, is per the criteria of MIL-PRF-15305. Transfer standards are used internally as correlated to the HP4342A Master Meter. This specification is utilized as the basis for all Military Qualified Coils. It is also employed as reference for the standard means on all non-Military parts located in the catalog. It is recommended for low inductances (under 0.10µH), and tight tolerances. In order to establish correlation between API Delevan and your equipment, consult the Sales Department for assistance concerning this important issue. All testing and methods for characterizing the inductive components are as performed by API Delevan. Further information is available for the details of these specific tests. Copies of Government specifications are not available from API Delevan. For additional information contact your local Representative, or the API Delevan Sales Department.

MARKING:

- Military qualified: MIL-PRF-15305E, Amendment 5 allows the use of laser marking at the option of the manufacturer (Paragraph 3.27.4). This is Delevan's standard means of identification. Color Banding is available as an option, but must be identified upon order placement. Suffix the catalog part number with a 'B' to designate this preferred means of identification (see chart on page 145 for code). MIL-PRF-39010 inductors are only available laser printed.
- Non-Military: Standard Catalog parts have examples shown on each page herein. Consult the API Delevan Sales Department for a complete description of the method utilized on the particular series.

PACKAGING: Standard is bulk. Axial parts, as an option, are available with leads Cut & Formed for thru-hole placement. Tape and Reel is also available as an option. See next page for available methods and maximum reel quantity capabilities. Custom labeling and Bar Coding are optionally available, consult the API Delevan Sales Department for your specific needs.

ENVIRONMENTAL CAPABILITIES: API Delevan has the equipment to perform testing for compliance to MIL-STD-202, MIL-STD-981, European Space Agency (ESA), or your specific criteria. Consult our Sales Department for a quotation to the specific requirements necessary for your application.

Thru-Hole Inductors

REEL TAPING SPECIFICATIONS

When requested, axial leaded components can be supplied on tape and reel, per EIA-296. Parts will be supplied on a Class III, Inside Taping Space dimension (See Fig. 2), unless otherwise specified by customer. Table 1, illustrates the relationship between Component Body Diameter, Distance Between Components and the Inside Taping Space (Classes I, II, III) that is used for reel taping.

Example 1: Part Number 1025-12K

Diameter: .095" ± 0.010" (2.41mm ± 0.25mm)

To be taped to Class III (Delevan's Standard Taping Class)

From Table I this part will be taped with an Inside Taping Space of 2.874" (73mm) and a Distance Between Components of 0.200" (5mm). See Figure 2.

Example 2: Part Number 2500-34J

Diameter 0.215" ± 0.010" (5.46mm ± 0.25mm)

To be taped to Class I (Customer Specified)

From Table I this part will be taped with the Inside Taping Space of 2.062" (52.4mm) and a Distance Between Components of 0.400" (10mm). See Figure 2.

Packaging Specifications for Radial Leaded/Variable Devices

Bulk Pack Only Series 2020, 2534, 2727, 3443, 4445, HC, PT, 9405, 9406

Bulk Pack or Ammo Pack Series 4554 & 4564. Standard bulk pack quantity for 4554 & 4564 Series is 100 pieces per box.

NOTE Ammo pack quantity is 1000 pieces max. per package.

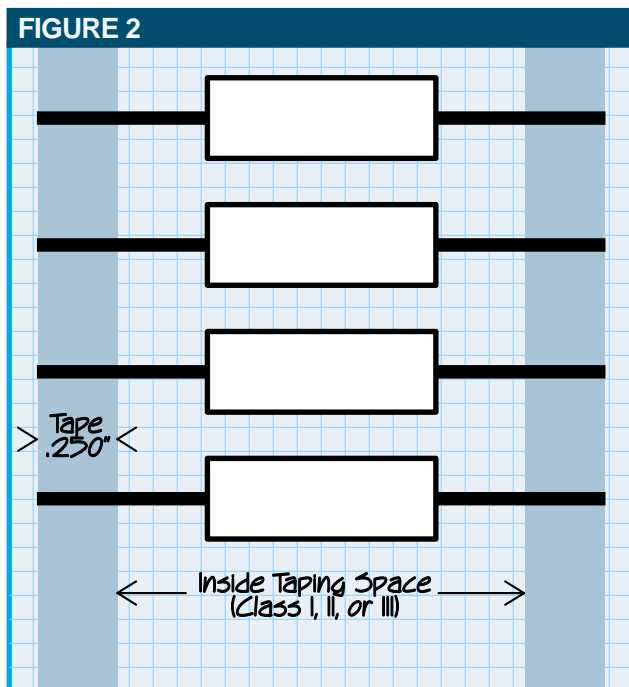


TABLE 1

COMPONENT BODY DIAMETER	DISTANCE BETWEEN COMPONENTS	INSIDE TAPING SPACE		
		I	II	III
INCHES	± 0.020"	± 0.059"		
—				
0.0" to 0.197"	0.200"	2.062"	2.500"	2.874"
0.197" to 0.394"	0.400"	2.062"	2.500"	2.874"
0.394" to 0.591"	0.600"	2.062"	2.500"	2.874"
MILLIMETERS	± 0.5mm	1.5mm		
0mm to 5mm	5mm	52.4mm	63.5mm	73mm
5.01mm to 10mm	10mm	52.4mm	63.5mm	73mm
10.01mm to 15mm	15mm	52.4mm	63.5mm	73mm

Tape & Reel Specifications for Catalog Parts

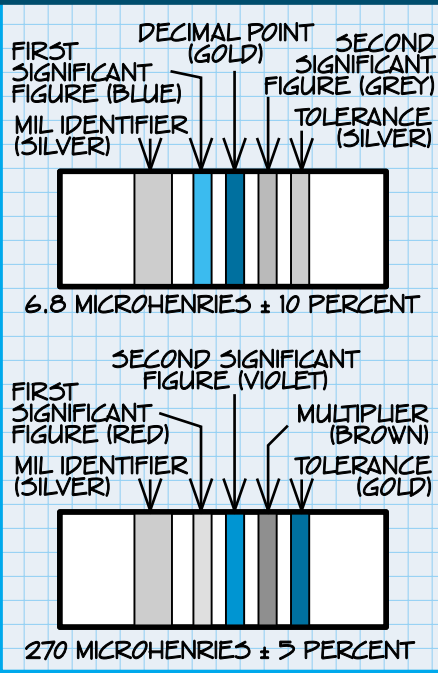
SERIES NUMBER	— MAXIMUM QUANTITY —	
	PER 12" DIAMETER REEL	PER 14" DIAMETER REEL
511	2500	4000
0819*	3500	6000
0925	3500	6000
1025/1026	3500	6000
1537	2500	4000
1638	2500	4000
1641	2500	4000
1782	3500	6000
1944, 1945	2500	3000
1840	2500	3000
2150	1000	1500
2256	1000	1500
2474	1000	1500
2500 -00 to -28	2500	3000
2500 -30 to -76	1000	1500
2890	800	1300
4211 -1 to -7	Not Avail.	4000
4211 -8 to -11	Not Avail.	1000
4211 -12 to -30	Not Avail.	4000
4212	Bulk Pack Only	
4307	2500	3000
4470	800	1300
ER1025	3500	6000
ER1537	2500	4000
ER1641	2500	4000
ER1840	2500	3000

NOTE: Our Standard Packaging is per EIA-296E, Class III (inside taping space measured at 2.874"). Class I and Class II supplied per request.

* 0819 Series does not comply with EIA-296E for Class III; spacing = 2.700" inside tape.

Thru-Hole Inductors

FIGURE 3



COLOR CODE (non-standard):

A silver band MIL identifier of double the width of the other bands, located near one end of the coil, identifies military radio frequency coils; four other bands of equal width, three indicating the inductance in microhenries and the fourth band indicating the tolerance in percent. When either the first or second band of the three bands is gold, it represents the decimal point for inductance values less than 10µH. The other two bands represent significant figures. For inductance values of 10 or more the first two bands represent significant figures, and the third band shall represent the multiplier. For small units, dots may be used instead of bands. The diameter of the MIL-identifier dot is larger than the other dots. The colors used are in accordance with MIL-STD-174. Typical color coding for units with inductance values less than 10 and for 10 or greater is shown above on figure 3.

TABLE 2 – COLOR CODE

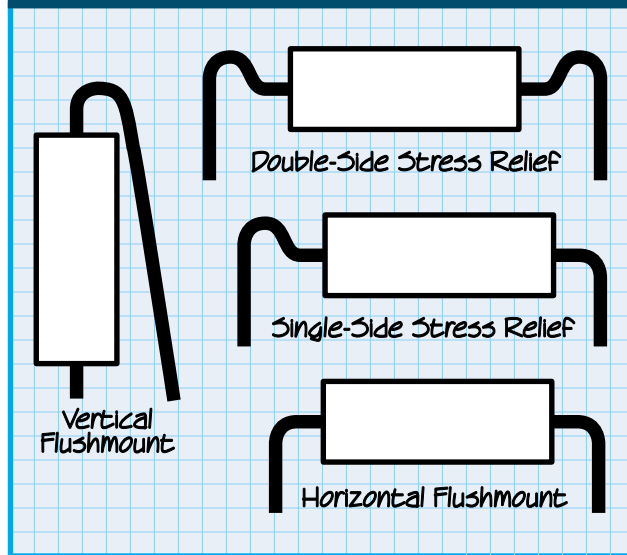
COLOR	SIGNIFICANT FIGURE	MULTIPLIER ¹	INDUCTANCE TOLERANCE
Black	0	1	-
Brown	1	10	+1%
Red	2	100	+2%
Orange	3	1,000	+3%
Yellow	4	-	-
Green	5	-	-
Blue	6	-	-
Violet	7	-	-
Grey	8	-	-
White	9	-	-
None ²	-	-	+20
Silver	-	-	+10
Gold	Decimal Point	-	+5

NOTES: 1) The multiplier is the factor by which the two significant figures are multiplied to yield the nominal inductance value.
 2) Indicates body color.

LEAD FORMING:

Optionally, API Delevan can provide configurations for direct, or thru-hole placement. Styles available are shown below in Figure 4.

FIGURE 4



Mil Standard to Delevan Conversion Chart

CURRENT			PREVIOUS			CURRENT			PREVIOUS			CURRENT			PREVIOUS				
MIL STANDARD	TYPE	PART NUMBER	MIL STANDARD	TYPE	PART NUMBER	MIL STANDARD	TYPE	PART NUMBER	MIL STANDARD	TYPE	PART NUMBER	MIL STANDARD	TYPE	PART NUMBER	MIL STANDARD	TYPE	PART NUMBER		
MS 14046	LT10K	1537	MS 18130	LT4K															
-1	128	-30K	17	090	▼ MS18100 -10 thru -20 See MS14040 MS18100 -23 thru -27 See MS14041 MS18100 -28 thru -32 See MS14042 MS18100 -33 thru -37 See MS14043 MS18100 -38 thru -42 See MS14044 MS18117 Canceled— No Superseding Document MS18118 Canceled— No Superseding Document MS18130 -17 thru -26 See MS14046 MS18131 Canceled— No Superseding Document MS18132 Canceled— No Superseding Document MS18133 Canceled— No Superseding Document			-20	373	-152K									
-2	129	-32K	18	091				-21	374	-182K									
-3	130	-34K	19	092				-22	375	-222K									
-4	131	-36K	20	093				-23	376	-272K									
-5	132	-38K	21	094				-24	377	-332K									
-6	133	-40K	22	095				-25	378	-392K									
-7	134	-42K	23	096				-26	379	-472K									
-8	135	-44K	24	097				-27	380	-562K									
-9	136	-47K	25	098				-28	381	-682K									
-10	137	-51K	26	099				-29	382	-822K									
					-30	383	-103K												
MS 14047	LT10K	3500	MS 75052	LT4K					MS* 21368	LT10K	150								
-1	138	-04K	3	054					-1	384	-123K								
-2	139	-06K	4	055					-2	385	-153K								
-3	140	-08K	5	056					-3	386	-183K								
-4	141	-10K	6	057					-4	387	-223K								
-5	142	-12K	7	058					-5	388	-273K								
									-6	389	-333K								
MS 14048	LT10K	3500	MS 75053	LT4K					-7	390	-393K								
-1	143	-14K	1	059					-8	391	-473K								
-2	144	-16K	2	060					-9	392	-563K								
-3	145	-18K	3	061					-10	393	-683K								
-4	146	-20K	4	062					-11	394	-823K								
-5	147	-22K	5	063					-12	395	-104K								
MS 14052	LT10K	2150	MS 90542	LT4K					MS* 21369	LT10K	250								
-1	158	-18K	14	328	MS 18130	LT4K	1537	MS 16225	LT7K	-1	396	-124K	MS* 21389	LT4K	1944				
-2	159	-20K	15	329	-1	074	-00M	1	102	-2	397	-154K	-01	440	-01M				
-3	160	-22K	16	330	-2	075	-02M	2	103	-3	398	-184K	-02	441	-02M				
-4	161	-24K	17	331	-3	076	-04M	3	104	-4	399	-224K	-03	442	-03M				
-5	162	-26K	18	332	-4	077	-06M	4	105	-5	400	-274K	-04	443	-04M				
-6	163	-28K	19	333	-5	078	-07K	5		-6	401	-334K	-05	444	-05M				
-7	164	-30K	20	334	-6	079	-08K	6	106	-7	402	-394K	-06	445	-06M				
-8	165	-32K	21	335	-7	080	-10K	7	107	-8	403	-474K	-07	446	-07M				
-9	166	-34K	22	336	-8	081	-12K	8	108	-9	404	-564K	-08	447	-08M				
-10	167	-36K	23	337	-9	082	-14K	9	109	-10	405	-684K	-09	448	-09M				
-11	168	-38K	24	338	-10	083	-16K	10	110	-11	406	-824K	-10	449	-10M				
					-11	084	-18K	11	111	-12	407	-105K	-11	450	-11M				
					-12	085	-20K	12	112				-12	451	-12M				
					-13	086	-22K	13	113	MS* 21380	LT4K	4470	-13	452	-13M				
					-14	087	-24K	14	114	-01	352	-01K	-14	453	-14M				
					-15	088	-26K	15	115	-02	353	-02K	-15	454	-15K				
					-16	089	-28K	16	116	-03	354	-03K	-16	455	-16K				
					MS 21367	LT10K	100			-04	355	-04K	-17	456	-17K				
					-1	354	-150N			-05	356	-05K							
					-2	355	-220N			-06	357	-06K							
					-3	356	-330N			-07	358	-07K							
					-4	357	-470N			-08	359	-08K							
					-5	358	-680N			-09	360	-09K							
					-6	359	-101N			-10	361	-10K							
					-7	360	-121M			-11	362	-11K							
					-8	361	-151M			-12	363	-12K							
					-9	362	-181M			-13	364	-13K							
					-10	363	-221M			-14	365	-14K							
					-11	364	-271M			-15	366	-15J							
					-12	365	-331M			-16	367	-16J							
					-13	366	-391M			-17	368	-17J							
					-14	367	-471M			-18	369	-18J							
					-15	368	-561M			-19	370	-19J							
					-16	369	-681M			-20	371	-20J							
					-17	370	-821M			-21	372	-21J							
					-18	371	-102M			-22	373	-22J							
					-19	372	-122K			-23	374	-23J							

▼
 MS16221 Revision A Superseded by MS75103 and 91189
 MS16222 Revision A Superseded by MS14052 and 90542
 MS16223 Revision B Superseded by MS14047, 14048, 14049, 14050 and 75052
 MS16224 Revision A Superseded by MS75008 and 75101
 MS16225 Revision B Canceled by MS14046 and 18130
 MS16226 Revision B Superseded by MS14040, 14041, 14042, 14043, 14044 and 18100

* COTS – “MS” is for reference only

TECHNICAL

CONTINUED ON NEXT PAGE

Mil Standard to Delevan Conversion Chart

CURRENT			PREVIOUS			CURRENT			PREVIOUS			CURRENT			PREVIOUS		
MIL STANDARD	TYPE	PART NUMBER	MIL STANDARD	TYPE	PART NUMBER	MIL STANDARD	TYPE	PART NUMBER	MIL STANDARD	TYPE	PART NUMBER	MIL STANDARD	TYPE	PART NUMBER	MIL STANDARD	TYPE	PART NUMBER
MS 75088	LT10K	1641	MS 90537	LT4K		-3	183	-32K	31	019	MS 90541	LT10K	2500				
-1	203	-102K	13	254		-4	184	-34K	32	020	-1	050	-56J				
-2	204	-122K	14	255		-5	185	-36K	33	021	-2	051	-58J				
-3	205	-152K	15	256		-6	186	-38K	34	022	-3	052	-60J				
-4	206	-182K	16	257		-7	187	-39K	35	023	-4	053	-62J				
-5	207	-222K	17	258		-8	188	-40K	36	024	-5	054	-64J				
-6	208	-272K	18	259		-9	189	-42K	37	025	-6	055	-66J				
-7	209	-332K	19	260		-10	190	-44K	38	026	-7	056	-68J				
-8	210	-392K	20	261		MS 90538	LT10K	1537			-8	057	-70J				
-9	211	-472K	21	262		-1	001	-54J			-9	058	-72J				
-10	212	-562K	22	263		-2	002	-56J			-10	059	-74J				
-11	213	-682K	23	264		-3	003	-58J			-11	060	-76J				
-12	214	-822K	24	265		-4	004	-60J			MS 90542	LT4K	2150	MS 16222	LT7K		
-13	215	-103K	25	266		-5	005	-62J			-1	315	-00K	1	233		
-14	216	-123K	26	267		-6	006	-64J			-2	316	-01K				
MS 75089	LT10K	1641	MS 90537	LT4K		-7	007	-66J			-3	317	-02K	2	234		
-1	217	-153K	27	268		-8	008	-68J			-4	318	-03K				
-2	218	-183K	28	269		-9	009	-70J			-5	318	-04K	3	235		
-3	219	-223K	29	270		-10	010	72J			-6	320	-05K				
-4	220	-273K	30	271		-11	011	-74J			-7	321	-06K	4	236		
-5	221	-333K	31	272		-12	012	-76J			-8	322	-07K				
-6	222	-393K	32	273		-13	013	-78J			-9	323	-08K	5	237		
-7	223	-473K	33	274		-14	014	-80J			-10	324	-10K	6	238		
-8	224	-563K	34	275		-15	015	-82J			-11	325	-12K	7	239		
-9	225	-683K	35	276		-16	016	-84J			-12	326	-14K	8	240		
-10	226	-823K	36	277		-17	017	-86J			-13	327	-16K	9	241		
-11	227	-104K	37	278		-18	018	-88J									
-12	228	-124K	38	279		-19	019	-90J									
-13	229	-154K	39	280		-20	020	-92J									
-14	230	-184K	40	281		-21	021	-94J									
-15	231	-224K	41	282		MS 90539	LT10K	2500			MS 91189	LT4K	2890	MS 91189	LT8K		
-16	232	-274K	42	283		-1	022	-00J			-14	002	-00K	1	001		
-17	233	-334K	43	284		-2	023	-02J			-15	003	-02K				
-18	234	-394K	44	285		-3	024	-04J			-16	004	-03K				
-19	235	-474K	45	286		-4	026	-06J			-17	005	-04K	2	002		
-20	236	-564K	46	287		-5	026	-08J			-18	006	-06K				
-21	237	-684K	47	288		-6	027	-10J			-19	007	-08K	3			
-22	238	-824K	48	289		-7	028	-12J			-20	008	-10K				
-23	239	-105K	49	290		-8	029	-15J			-21	009	-12K				
MS 75101	LT10K	1840	MS 75008	LT4K		-9	030	-16J			-22	010	-14K				
-1	169	-18K	34	040		-10	031	-18J			-23	011	-16K	5	005		
-2	170	-20K	35	041		-11	032	-20J			-24	012	-18K				
-3	171	-22K	36	042		-12	033	-22J			-25	013	-20K	6	006		
-4	172	-24K	37	043		-13	034	-24J			-26	014	-22K				
-5	173	-26K	38	044		-14	035	-26J			-27	015	-24K	7	007		
-6	174	-28K	39	045		-15	036	-28J			-28	016	-26K				
-7	175	-30K	40	046		MS 90540	LT10K	2500									
-8	176	-32K	41	047		-1	037	-30J									
-9	177	-34K	42	048		-2	038	-32J									
-10	178	-35K	43	049		-3	039	-34J									
-11	179	-36K	44	050		-4	040	-36J									
-12	180	-38K	45	051		-5	041	-38J									
MS 75103	LT10K	2890	MS 91189	LT4K		-6	042	-40J									
-1	181	-28K	29	017		-7	043	-42J									
-2	182	-30K	30	018		-8	044	-44J									
						-9	045	-46J									
						-10	046	-48J									
						-11	047	-50J									
						-12	048	-52J									
						-13	049	-54J									

* COTS - "MS" is for reference only

MS90542-14 thru -24
See MS14052

MS91189-29 thru -38
See MS75103

CONTINUED ON NEXT PAGE

Mil 83446/ to Delevan Conversion Chart

GOV'T. PART # (TERMINATION)		DELEVAN PART #		GOV'T. PART # (TERMINATION)		DELEVAN PART #		GOV'T. PART # (TERMINATION)		DELEVAN PART #	
M83446/ 04-		M83446/ 08- *		M83446/ 10- *		M83446/ 11- *					
01 ()	121K()	87()	123K()	62()	100K()	62()	101K()				
02 ()	151K()	88()	153K()	63()	120K()	63()	121K()				
03 ()	181K()	89()	183K()	64()	150K()	64()	151K()				
04 ()	221K()	90()	223K()	65()	180K()	65()	181K()				
05 ()	271K()	91()	273K()	66()	220K()	66()	221K()				
06 ()	331K()	92()	333K()	67()	270K()	67()	271K()				
07 ()	391K()	93()	393K()	68()	330K()	68()	331K()				
08 ()	471K()	94()	473K()	69()	390K()	69()	391K()				
09 ()	561K()	95()	565K()	70()	470K()	70()	471K()				
10 ()	681K()	96()	683K()	71()	560K()	71()	561K()				
11 ()	821K()	97()	823K()	72()	680K()	72()	681K()				
12 ()	102K()	98()	104K()	73()	820K()	73()	821K()				
13 ()	122K()			74()	101K()	74()	102K()				
14 ()	152K()			75()	121K()	75()	122K()				
15 ()	182K()			76()	151K()	76()	152K()				
16 ()	222K()			77()	181K()	77()	182K()				
17 ()	272K()			78()	221K()	78()	222K()				
18 ()	332K()			79()	271K()	79()	272K()				
19 ()	392K()			80()	331K()	80()	332K()				
20 ()	472K()			81()	391K()	81()	392K()				
21 ()	562K()			82()	471K()	82()	472K()				
22 ()	682K()			83()	561K()	83()	562K()				
23 ()	822K()			84()	681K()	84()	682K()				
24 ()	103K()			85()	821K()	85()	822K()				
25 ()	123K()			86()	102K()	86()	103K()				
26 ()	153K()			87()	122K()	87()	123K()				
27 ()	183K()			88()	152K()	88()	153K()				
28 ()	223K()			89()	182K()	89()	183K()				
29 ()	273K()			90()	222K()	90()	223K()				
30 ()	100M()			91()	272K()	91()	273K()				
31 ()	150M()			92()	332K()	92()	333K()				
32 ()	220M()			93()	392K()	93()	393K()				
33 ()	330M()			94()	472K()	94()	473K()				
34 ()	470M()			95()	562K()	95()	563K()				
35 ()	680M()			96()	682K()	96()	683K()				
36 ()	101M()			97()	822K()	97()	823K()				
37 ()	100K()			98()	103K()	98()	104K()				
38 ()	120K()			99()	123K()	99()	124K()				
39 ()	150K()			100()	153K()	100()	154K()				
40 ()	180K()			101()	153K()	101()	184K()				
41 ()	220K()			102()	223K()	102()	224K()				
42 ()	270K()			103()	273K()	103()	274K()				
43 ()	330K()			104()	333K()	104()	334K()				
44 ()	390K()			105()	393K()	105()	394K()				
45 ()	470K()			106()	472K()	106()	474K()				
46 ()	560K()			107()	563K()	107()	564K()				
47 ()	680K()			108()	683K()	108()	684K()				
48 ()	820K()			109()	823K()	109()	824K()				
49 ()	101K()			110()	104K()	110()	105K()				
				111()	124K()	111()	125K()				
				112()	154K()	112()	155K()				
				113()	184K()	113()	185K()				
				114()	224K()	114()	225K()				
				115()	274K()	115()	275K()				
				116()	334K()	116()	335K()				
				117()	394K()	117()	395K()				
				118()	474K()	118()	475K()				
				119()	564K()	119()	565K()				
				120()	684K()	120()	685K()				
				121()	824K()	121()	825K()				
				122()	105K()	122()	106K()				

MIL-PRF-83446
/04, /08, /10, /11 & /38
TERMINATION FINISH OPTIONS:
CODE A – Final finish gold over nickel
CODE B – Final finish tin-lead over nickel
CODE F – Final finish tin-lead

* COTS – "MS" is for reference only

TECHNICAL

Mil 83446/ to Delevan Conversion Chart

GOV'T. PART #	DELEVAN PART #	GOV'T. PART #	DELEVAN PART #	GOV'T. PART #	DELEVAN PART #	GOV'T. PART #	DELEVAN PART #	GOV'T. PART #	DELEVAN PART #	GOV'T. PART #	DELEVAN PART #	GOV'T. PART #	DELEVAN PART #
M83446/ 20- M0820-		M83446/ 23- M1330-		M83446/ 26- M1331-		M83446/ 28- MIL2510-		M83446/ 31- MIL1330-		M83446/ 34- MIL1331-		M83446/ 38- 160-	
01F	00K	01F	94K	01F	101K	01F	00K	01F	94K	01F	101K	01()	100M()
02F	02K	02F	96K	02F	121K	02F	02K	02F	96K	02F	121K	02()	120M()
03F	04K	03F	00K	03F	151K	03F	04K	03F	00K	03F	151K	03()	150M()
04F	06K	04F	02K	04F	181K	04F	06K	04F	02K	04F	181K	04()	180M()
05F	08K	05F	04K	05F	221K	05F	08K	05F	04K	05F	221K	05()	220M()
06F	10K	06F	06K	06F	271K	06F	10K	06F	06K	06F	271K	06()	270M()
07F	12K	07F	08K	07F	331K	07F	12K	07F	08K	07F	331K	07()	330M()
08F	14K	08F	10K	08F	391K	08F	14K	08F	10K	08F	391K	08()	390M()
09F	16K	09F	12K	09F	471K	09F	16K	09F	12K	09F	471K	09()	470M()
		10F	14K	10F	561K			10F	14K	10F	561K	10()	560M()
		11F	16K	11F	681K			11F	16K	11F	681K	11()	680M()
		12F	18K	12F	821K			12F	18K	12F	821K	12()	820M()
		13F	20K	13F	102K			13F	20K	13F	102K	13()	101K()
				14F	122K					14F	122K	14()	121K()
				15F	152K					15F	152K	15()	151K()
				16F	182K					16F	182K	16()	181K()
				17F	222K					17F	222K	17()	221K()
				18F	272K					18F	272K	18()	271K()
				19F	332K					19F	332K	19()	301K()
				20F	392K					20F	392K	20()	331K()
				21F	472K					21F	472K	21()	361K()
				22F	562K					22F	562K	22()	391K()
				23F	682K					23F	682K	23()	421K()
				24F	822K					24F	822K	24()	471K()
				25F	103K					25F	103K	25()	561J()
				26F	123K					26F	123K	26()	681J()
				27F	153K					27F	153K	27()	821J()
				28F	183K					28F	183K	28()	102J()
				29F	223K					29F	223K	29()	122J()
				30F	273K					30F	273K	30()	152J()
				31F	333K					31F	333K	31()	182J()
				32F	393K					32F	393K	32()	222J()
				33F	473K					33F	473K	33()	272J()
				34F	563K					34F	563K	34()	332J()
				35F	683K					35F	683K	35()	392J()
				36F	823K					36F	823K	36()	472J()
				37F	104K					37F	104K	37()	562J()
												38()	682J()
												39()	822J()
												40()	103J()
												41()	123J()
												42()	153J()
												43()	183J()
												44()	223J()
												45()	273J()
												46()	333J()
												47()	393J()
												48()	473J()
												49()	563J()
												50()	683J()
												51()	823J()
												52()	104J()
												53()	124J()
												54()	154J()
												55()	184J()
												56()	224J()
												57()	274J()
												58()	334J()
												59()	394J()
												60()	474J()
												61()	564J()

MIL-PRF-83446 TERMINATION FINISH:
 /20 thru /35
CODE F – Final finish tin-lead
 /38 Options:
CODE B – Final finish tin-lead over nickel
CODE F – Final finish tin-lead

TECHNICAL

Mil 83446/ to Delevan Conversion Chart

GOVT. PART # (TERMINATION)		DELEVAN PART #		GOVT. PART # (TERMINATION)		DELEVAN PART #		GOVT. PART # (TERMINATION)		DELEVAN PART #	
M83446/ 39-	MIL1812-	M83446/ 39-	MIL1812R-	M83446/ 40-	MILS1812-	M83446/ 40-	MILS1812R-				
-01F	-100M	-01P	-100M	-01F	-101K	-01P	-101K				
-02F	-120M	-02P	-120M	-02F	-121K	-02P	-121K				
-03F	-150M	-03P	-150M	-03F	-151K	-03P	-151K				
-04F	-160M	-04P	-160M	-04F	-181K	-04P	-181K				
-05F	-220M	-05P	-220M	-05F	-221K	-05P	-221K				
-06F	-270M	-06P	-270M	-06F	-271K	-06P	-271K				
-07F	-330M	-07P	-330M	-07F	-331K	-07P	-331K				
-08F	-390M	-08P	-390M	-08F	-391K	-08P	-391K				
-09F	-470M	-09P	-470M	-09F	-471K	-09P	-471K				
-10F	-560M	-10P	-560M	-10F	-561K	-10P	-561K				
-11F	-680M	-11P	-680M	-11F	-681K	-11P	-681K				
-12F	-820M	-12P	-820M	-12F	-821K	-12P	-821K				
-13F	-101K	-13P	-101K	-13F	-102K	-13P	-102K				
-14F	-121K	-14P	-121K	-14F	-122K	-14P	-122K				
-15F	-151K	-15P	-151K	-15F	-152K	-15P	-152K				
-16F	-181K	-16P	-181K	-16F	-182K	-16P	-182K				
-17F	-221K	-17P	-221K	-17F	-222K	-17P	-222K				
-18F	-271K	-18P	-271K	-18F	-272K	-18P	-272K				
-19F	-331K	-19P	-331K	-19F	-332K	-19P	-332K				
-20F	-391K	-20P	-391K	-20F	-392K	-20P	-392K				
-21F	-471K	-21P	-471K	-21F	-472K	-21P	-472K				
-22F	-561K	-22P	-561K	-22F	-562K	-22P	-562K				
-23F	-681K	-23P	-681K	-23F	-682K	-23P	-682K				
-24F	-821K	-24P	-821K	-24F	-822K	-24P	-822K				
-25F	-102J	-25P	-102J	-25F	-103K	-25P	-103K				
-26F	-122J	-26P	-122J	-26F	-123K	-26P	-123K				
-27F	-152J	-27P	-152J	-27F	-153K	-27P	-153K				
-28F	-182J	-28P	-182J	-28F	-183K	-28P	-183K				
-29F	-222J	-29P	-222J	-29F	-223K	-29P	-223K				
-30F	-272J	-30P	-272J	-30F	-273K	-30P	-273K				
-31F	-332J	-31P	-332J	-31F	-333K	-31P	-333K				
-32F	-392J	-32P	-392J	-32F	-393K	-32P	-393K				
-33F	-472J	-33P	-472J	-33F	-473K	-33P	-473K				
-34F	-562J	-34P	-562J	-34F	-563K	-34P	-563K				
-35F	-682J	-35P	-682J	-35F	-683K	-35P	-683K				
-36F	-822J	-36P	-822J	-36F	-823K	-36P	-823K				
-37F	-103J	-37P	-103J	-37F	-104K	-37P	-104K				
-38F	-123J	-38P	-123J	-38F	-124K	-38P	-124K				
-39F	-153J	-39P	-153J	-39F	-154K	-39P	-154K				
-40F	-183J	-40P	-183J	-40F	-184K	-40P	-184K				
-41F	-223J	-41P	-223J	-41F	-224K	-41P	-224K				
-42F	-273J	-42P	-273J	-42F	-274K	-42P	-274K				
-43F	-333J	-43P	-333J	-43F	-334K	-43P	-334K				
-44F	-393J	-44P	-393J	-44F	-394K	-44P	-394K				
-45F	-473J	-45P	-473J	-45F	-474K	-45P	-474K				
-46F	-563J	-46P	-563J	-46F	-564K	-46P	-564K				
-47F	-683J	-47P	-683J	-47F	-684K	-47P	-684K				
-48F	-823J	-48P	-823J	-48F	-824K	-48P	-824K				
-49F	-104J	-49P	-104J	-49F	-105K	-49P	-105K				
-50F	-124J	-50P	-124J								
-51F	-154J	-51P	-154J								
-52F	-184J	-52P	-184J								
-53F	-224J	-53P	-224J								
-54F	-274J	-54P	-274J								
-55F	-334J	-55P	-334J								
-56F	-394J	-56P	-394J								
-57F	-474J	-57P	-474J								
-58F	-564J	-58P	-564J								
-59F	-684J	-59P	-684J								
-60F	-824J	-60P	-824J								
-61F	-105J	-61P	-105J								

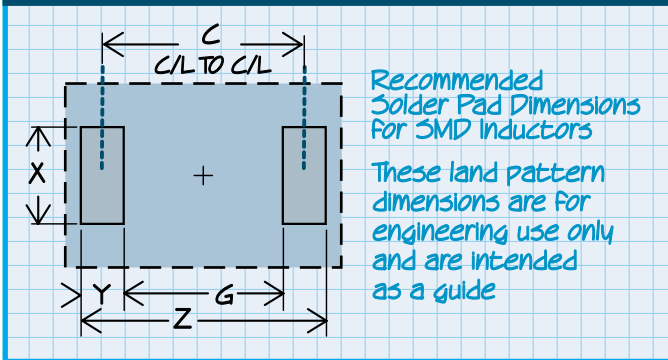
MIL-PRF-83446
/39 & /40
TERMINATION FINISH OPTIONS:
CODE F – Final finish tin-lead
CODE P – Final finish Pb free

TECHNICAL

Suggested Land Patterns

Surface Mount Inductors

FIGURE 1



Suggested Surface Mount Land Patterns

(See Figure 1 at left)

The dimensions listed here are suggested land patterns. The values in this table will usually provide for a positive solder fillet. The user may increase or decrease the values based on process capability.

* For 4221, EMIxxx, Cxxxx, LLST: Actual dimensions with modified tolerances were used to achieve greater accuracy. On other series, max. specs. were used.

For Series Numbers not listed, see individual pages for these dimensions

SERIES	INCHES ± .005					MILLIMETERS ± 0.12				
	Z	G	Y	X	C	Z	G	Y	X	C
103, 105, 108, 3090	0.160	0.035	0.050	0.130	0.110	4.06	0.890	1.27	3.30	2.79
160, 4379, 3094	0.205	0.095	0.055	0.145	0.150	5.21	2.41	1.40	3.68	3.81
1008, S1008, 1008HF, 4302	0.165	0.055	0.055	0.080	0.110	4.19	1.40	1.40	2.03	2.79
1210, S1210, 4232	0.188	0.088	0.050	0.081	0.138	4.78	2.24	1.27	2.06	3.51
1330, P1330, 1331	0.375	0.205	0.085	0.080	0.290	9.53	5.21	2.16	2.03	7.37
1812, P1812, S1812	0.240	0.110	0.065	0.098	0.175	6.10	2.79	1.65	2.49	4.45
2510, 2512	0.305	0.095	0.105	0.065	0.200	7.75	2.41	2.67	1.65	5.08
3483, S3483	0.349	0.219	0.065	0.111	0.284	8.86	5.56	1.65	2.82	7.21
4922, 4924, 5022	0.570	0.370	0.100	0.095	0.470	14.48	9.40	2.54	2.41	11.94
8532	0.930	0.676	0.127	0.130	0.803	23.62	17.17	3.23	3.30	20.40
4221-1	0.230	0.086	0.080	0.062	0.150	5.84	2.18	2.03	1.57	3.81
4221-2	0.402	0.211	0.087	0.060	0.315	10.21	5.35	2.21	1.52	8.00
4221-3	0.245	0.085	0.085	0.062	0.160	6.22	2.16	2.16	1.57	4.06
4221-4	0.380	0.171	0.095	0.095	0.285	9.65	4.34	2.41	2.41	7.24
C1608	0.119	0.039	0.040	0.042	0.079	3.02	0.99	1.02	1.07	2.01
C2012	0.135	0.049	0.043	0.067	0.092	3.43	1.24	1.09	1.70	2.34
EMI0603	0.115	0.029	0.043	0.042	0.072	2.92	0.74	1.09	1.07	1.83
EMI0805	0.133	0.033	0.050	0.057	0.083	3.38	0.84	1.27	1.45	2.11
EMI1206	0.178	0.078	0.050	0.082	0.128	4.52	1.98	1.27	2.08	3.25
EMI1210	0.179	0.081	0.050	0.120	0.129	4.55	2.06	1.27	3.05	3.28
EMI1806	0.230	0.121	0.056	0.086	0.174	5.84	3.07	1.42	2.18	4.42
EMI1812	0.230	0.121	0.056	0.148	0.174	5.84	3.07	1.42	3.76	4.42
LLST	0.450	0.344	0.053	0.355	0.397	11.43	8.74	1.35	9.02	10.08
M0820	0.305	0.118	0.085	0.101	0.220	7.75	3.00	2.16	2.57	5.59
M1330, M1331	0.370	0.240	0.065	0.115	0.305	9.40	6.10	1.65	2.92	7.75
PD104/105	0.445	0.095	0.175	0.376	0.270	11.30	2.41	4.45	9.55	6.86
PD43	0.225	0.043	0.091	0.181	0.134	5.72	1.09	2.31	4.60	3.40
PD54	0.282	0.056	0.113	0.226	0.169	7.16	1.42	2.87	5.74	4.29
PD75	0.361	0.071	0.145	0.297	0.216	9.17	1.80	3.68	7.54	5.49
SPD125/127	0.535	0.285	0.125	0.220	0.410	13.59	7.24	3.18	5.59	10.41
SPD73/74	0.355	0.175	0.090	0.130	0.265	9.02	4.45	2.29	3.30	6.73
SPD62	0.290	0.150	0.070	0.080	0.220	7.36	3.81	1.78	2.03	5.59

Technical Notes

Component Surface Finish

API SERIES NUMBER	PRIMARY SURFACE FINISH	OPTIONAL SURFACE FINISH ON API SERIES NUMBER	ROHS SERIES NUMBER	ROHS SURFACE FINISH	OPTIONAL SURFACE FINISH
100	Sn60/Pb40	Gold Plate	100R	Sn95.5/Ag3.8/Cu0.7	
103	Gold	Sn63/Pb37	103R	Sn95.5/Ag3.8/Cu0.7	
105	Gold	Sn63/Pb37	105R	Sn95.5/Ag3.8/Cu0.7	
106	Gold				Consult Factory
108	Gold	Sn63/Pb37	108R	Sn95.5/Ag3.8/Cu0.7	
160	Sn63/Pb37	Gold Plate	160R	Sn95.5/Ag3.8/Cu0.7	
511	Sn63/Pb37		511R	Sn99.3/Cu0.7	
1008	Sn63/Pb37		1008R	Sn95.5/Ag3.8/Cu0.7	
1025	Sn63/Pb37		1025R	Sn99.3/Cu0.7	
1026	Sn63/Pb37		1026R	Sn99.3/Cu0.7	
1210	Sn63/Pb37		1210R	Sn95.5/Ag3.8/Cu0.7	
1330	Sn63/Pb37		1330R	Sn95.5/Ag3.8/Cu0.7	
1331	Sn63/Pb37		1331R	Sn95.5/Ag3.8/Cu0.7	
1537	Sn63/Pb37		1537R	Sn99.3/Cu0.7	
1638	Sn63/Pb37		1638R	Sn99.3/Cu0.7	
1641	Sn63/Pb37		1641R	Sn99.3/Cu0.7	
1782	Sn63/Pb37		1782R	Sn99.3/Cu0.7	
1812	Sn63/Pb37		1812R	Sn95.5/Ag3.8/Cu0.7	
1840	Sn63/Pb37		1840R	Sn99.3/Cu0.7	
1944	Sn63/Pb37		1944R	Sn99.3/Cu0.7	
1945	Sn63/Pb37		1945R	Sn99.3/Cu0.7	
2020	Sn63/Pb37		2020R	Sn99.3/Cu0.7	
2150	Sn63/Pb37		2150R	Sn99.3/Cu0.7	
2256	Sn63/Pb37		2256R	Sn99.3/Cu0.7	
2474	100%Tin		2474R	Sn99.3/Cu0.7	
2500	Sn63/Pb37		2500R	Sn99.3/Cu0.7	
2510	Sn63/Pb37		2510R	Sn95.5/Ag3.8/Cu0.7	
2512	Sn63/Pb37		2512R	Sn95.5/Ag3.8/Cu0.7	
2534	Sn63/Pb37		2534R	Sn99.3/Cu0.7	
2727	Sn63/Pb37		2727R	Sn99.3/Cu0.7	
2890	Sn63/Pb37		2890R	Sn99.3/Cu0.7	
3090	Gold	Sn63/Pb37	3090R	Sn95.5/Ag3.8/Cu0.7	
3094	Sn63/Pb37	Gold Plate	3094R	Sn95.5/Ag3.8/Cu0.7	
3223	Sn63/Pb37		3223R	Sn95.5/Ag3.8/Cu0.7	
3443	Sn63/Pb37		3443R	Sn99.3/Cu0.7	
			3483R	Sn96/Cu4.0	
4211	Sn90/Pb10		4211R	100%Tin	
4212	Sn90/Pb10		4212R	100%Tin	
4214	Sn90/Pb10		4214R	100%Tin	
4221	Sn90/Pb10		4221R	100%Tin	
4222	Sn90/Pb10		4222R	100%Tin	
4232	Sn63/Pb37		4232R	Sn95.5/Ag3.8/Cu0.7	
4302	Sn63/Pb37		4302R	Sn95.5/Ag3.8/Cu0.7	
4307	Sn63/Pb37		4307R	Sn99.3/Cu0.7	
4379	Sn63/Pb37	Gold Plate	4379R	Sn95.5/Ag3.8/Cu0.7	
4426	Sn90/Pb10		4426R	100%Tin	
4445	Sn63/Pb37		4445R	Sn99.3/Cu0.7	
4448	100%Tin		4448R	100%Tin	
4470	Sn63/Pb37		4470R	Sn99.3/Cu0.7	
4494	Sn60/Pb40		4494R	Sn95.5/Ag3.8/Cu0.7	
4501	100%Tin		4501R	100%Tin	

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TECHNICAL

Component Surface Finish (Continued)

API SERIES NUMBER	PRIMARY SURFACE FINISH	OPTIONAL SURFACE FINISH ON API SERIES NUMBER	ROHS SERIES NUMBER	ROHS SURFACE FINISH	OPTIONAL SURFACE FINISH
4554	Sn63/Pb37		4554R	Sn99.3/Cu0.7	
4564	Sn63/Pb37		4564R	Sn99.3/Cu0.7	
4590	Sn63/Pb37		4590R	Sn99.3/Cu0.7	
4669	Sn63/Pb37		4669R	Sn99.3/Cu0.7	
4922	Sn63/Pb37		4922R	Sn95.5/Ag3.8/Cu0.7	
5022	Sn63/Pb37		5022R	Sn95.5/Ag3.8/Cu0.7	
5142	Sn90/Pb10		5142R	100%Tin	
5526	Sn90/Pb10		5526R	100%Tin	
8454	Sn90/Pb10		8454R	100%Tin	
8532	Sn63/Pb37		8532R	Sn95.5/Ag3.8/Cu0.7	
9405	Sn61/Pb36/Ag3		9405R	Sn99.3/Cu0.7	
9406	Sn61/Pb36/Ag3		9406R	Sn99.3/Cu0.7	
9565	Sn90/Pb10		9565R	100%Tin	
0402	Sn90/Pb10		0402R	100%Tin	Consult Factory
0603	Sn90/Pb10		0603R	100%Tin	Consult Factory
0805	Sn90/Pb10		0805R	100%Tin	Consult Factory
0819	Sn63/Pb37		0819R	Sn99.3/Cu0.7	
0925	Sn63/Pb37		0925R	Sn99.3/Cu0.7	
HF1008	Sn63/Pb37		HF1008R	Sn95.5/Ag3.8/Cu0.7	
WW1008	Sn90/Pb10		WW1008R	100%Tin	Consult Factory
6012 - 6017	Sn90/Pb10		6012R -6017R	100%Tin	
6022 - 6027	Sn90/Pb10		6022R -6027R	100%Tin	
6051 - 6055	Sn90/Pb10		6051R -6055R	100%Tin	
6443 - 6448	Sn90/Pb10		6443R -6448R	100%Tin	
6494 - 6498	Sn90/Pb10		6494R -6498R	100%Tin	
6655 - 6658	Sn90/Pb10		6655R -6658R	100%Tin	
6665 -6668	Sn90/Pb10		6665R -6668R	100%Tin	
BF	No Termination Area				
C1608	100%Tin		C1608R	100%Tin	
C2012	100%Tin		C2012R	100%Tin	
CF	No Termination Area				
CM1011	Sn60/Pb40		CM1011R	Sn99.3/Cu0.7	
CM6149	100%Tin		CM6149R	Sn95.5/Ag3.8/Cu0.7	
CM6296	Sn63/Pb37		CM6296R	Sn95.5/Ag3.8/Cu0.7	
CM6350	100%Tin		CM6350R	Sn95.5/Ag3.8/Cu0.7	
CM6460	100%Tin		CM6460R	Sn95.5/Ag3.8/Cu0.7	
CM6560	100%Tin		CM6560R	Sn95.5/Ag3.8/Cu0.7	
CM6594	Sn63/Pb37		CM6594R	Sn95.5/Ag3.8/Cu0.7	
CM7560	Sn60/Pb40		CM7560R	100%Tin	
CM9900	Sn60/Pb40		CM9900R	100%Tin	
CMT4545	100%Tin		CMT4545R	100%Tin	
CSP	No Termination Area				
DC630	Sn63/Pb37		DC630R	Sn99.3/Cu0.7	
DC780	Sn63/Pb37		DC780R	Sn99.3/Cu0.7	
EMI0603	Sn90/Pb10		EMI0603R	100%Tin	
EMI0805	Sn90/Pb10		EMI0805R	100%Tin	
EMI1206	Sn90/Pb10		EMI1206R	100%Tin	
EMI1210	Sn90/Pb10		EMI1210R	100%Tin	
EMI1806	Sn90/Pb10		EMI1806R	100%Tin	
EMI1812	Sn90/Pb10		EMI1812R	100%Tin	
ER1025	Sn63/Pb37				Consult Factory
ER1537	Sn63/Pb37				Consult Factory
ER1641	Sn63/Pb37				Consult Factory
ER1840	Sn63/Pb37				Consult Factory
FFAM	No Termination Area				
FFAT	No Termination Area				
FTA	No Termination Area				
FW1405	Sn90/Pb10		FW1405R		Consult Factory

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Component Surface Finish (Continued)

API SERIES NUMBER	PRIMARY SURFACE FINISH	OPTIONAL SURFACE FINISH ON API SERIES NUMBER	ROHS SERIES NUMBER	ROHS SURFACE FINISH	OPTIONAL SURFACE FINISH
HC	Sn63/Pb37		HCR	Sn99.3/Cu0.7	
HCT	Sn63/Pb37		HCTR	Sn95.5/Ag3.8/Cu0.7	
LLST	Sn90/Pb10		LLSTR	100%Tin	
MIL1330	Sn63/Pb37				Consult Factory
MIL1331	Sn63/Pb37				Consult Factory
P1330	Sn63/Pb37		P1330R	Sn95.5/Ag3.8/Cu0.7	
P1812	Sn63/Pb37		P1812R	Sn95.5/Ag3.8/Cu0.7	
PA	No Termination Area				
PD104	Sn95/Pb5	Gold Plate	PD104R	100%Tin	
PD105	Sn95/Pb5	Gold Plate	PD105R	100%Tin	
PD43	Sn95/Pb5	Gold Plate	PD43R	100%Tin	
PD54	Sn95/Pb5	Gold Plate	PD54R	100%Tin	
PD73	Sn95/Pb5	Gold Plate	PD73R	100%Tin	
PD75	Sn95/Pb5	Gold Plate	PD74R	100%Tin	
PT	Sn63/Pb37		PTR	Sn99.3/Cu0.7	
PTHF	Sn63/Pb37		PTHFR	Sn99.3/Cu0.7	
PTHF-SM	Sn63/Pb37		PTHFR-SM	Sn95.5/Ag3.8/Cu0.7	Consult Factory
PTHF-VM	Sn63/Pb37		PTHFR-VM	Sn99.3/Cu0.7	
PTKM	Sn63/Pb37		PTKMR	Sn99.3/Cu0.7	
PTKM-SM	Sn63/Pb37		PTKMR-SM	Sn95.5/Ag3.8/Cu0.7	Consult Factory
PTKM-VM	Sn63/Pb37		PTKMR-VM	Sn99.3/Cu0.7	
RPC/RPU	No Termination Area				
S1008	Sn63/Pb37		S1008R	Sn95.5/Ag3.8/Cu0.7	
S1210	Sn63/Pb37		S1210R	Sn95.5/Ag3.8/Cu0.7	
S1812	Sn63/Pb37		S1812R	Sn95.5/Ag3.8/Cu0.7	
			S3483R	Sn96/Cu4.0	
S4924	Sn63/Pb37		S4924R	Sn95.5/Ag3.8/Cu0.7	
SDS130	Sn90/Pb10		SDS130R		Consult Factory
SDS680	Sn90/Pb10		SDS680R		Consult Factory
SDS850	Sn90/Pb10		SDS850R		Consult Factory
SMB2.5	Sn90/Pb10		SMB2.5R	100%Tin	
SPD125	Sn95/Pb5	Gold Plate	SPD125R	100%Tin	
SPD127	Sn95/Pb5	Gold Plate	SPD127R	100%Tin	
SPD62	Sn95/Pb5	Gold Plate	SPD62R	100%Tin	
SPD73	Sn95/Pb5	Gold Plate	SPD73R	100%Tin	
SPD74	Sn95/Pb5	Gold Plate	SPD74R	100%Tin	
SPST	Sn60/Pb40		SPSTR	Sn99.3/Cu0.7	



Prototyping Kits

OTHER KITS AVAILABLE

Consult factory

Reference series pages
for specifications

Series	Inductance	Tolerance	Construction	# of Values	Quantity each Value
Unshielded Chip Inductor Kits					
Series 0603	1.6 nH to 390 nH	5%	Open	42	10
Series 0603	10.0 nH to 390 nH	2%	Open	28	10
Series 0805	2.8 nH to 2700 nH	5%	Open	45	10
Series 0805	10.0 nH to 2700 nH	2%	Open	38	10
Series 1008	.0018 uH to 47.0 uH	20% to 5%	Molded	54	5
Series 1008	.0018 uH to 47.0 uH	2%	Molded	54	5
Series HF1008	4.7 nH to 4700 nH	20% to 10%	Molded	38	5
Series HF1008	4.7 nH to 4700 nH	2%	Molded	38	5
Series 1210	.0018 uH to 100 uH	20% to 5%	Molded	58	5
Series 1210	.0018 uH to 100 uH	2%	Molded	58	5
Series 1812	.010 uH to 1000 uH	20% to 5%	Molded	61	5
Series 1812	.010 uH to 1000 uH	2%	Molded	61	5
Shielded Chip Inductor Kits					
Series S1008	0.10 to 47.0uH	10%	Molded	36	5
Series S1008	0.10 to 47.0uH	2%	Molded	36	5
Series S1210	0.10 to 100.0uH	10%	Molded	37	5
Series S1210	0.10 to 100.0uH	2%	Molded	37	5
Series S1812	0.10 to 1000.0uH	20% to 10%	Molded	49	5
Series S1812	0.10 to 1000.0uH	2%	Molded	49	5
Temperature Stable Chip Inductor Kits					
Series 4302	0.12 to 27 uH	10%	Molded	29	5
Series 4302	0.12 to 27 uH	2%	Molded	29	5
Series 4232	0.10 to 47 uH	10%	Molded	33	5
Series 4232	0.10 to 47 uH	2%	Molded	33	5
Power Chip Inductor Kits					
Series P1812	1.0 to 330uH	10% to 2%	Molded	31	5
Series P1330	1.0 to 1000uH	10% to 2%	Molded	37	5
Air Core Inductor Kits					
Series 4426	2.5 to 43 nH	5%	Open	8	10
Series 4426	2.5 to 43 nH	2%	Open	8	10
Series 5526	90 nH to 538 nH	5%	Open	8	10
Series 5526	90 nH to 538 nH	2%	Open	8	10
	Operating Range		Peak		
EMI / RFI Kits					
Series BF	30 to 300 MHz	—	100 to 400 MHz	12	1
RPC / RPU	30 to 300 MHz	—	100 to 500 MHz	8	1
Series 8454	10 to 100 MHz	—	15 to 100 MHz	5	4
9565	10 to 200 MHz	—	30 to 100 MHz	5	4
CSP	50 to 500 MHz	—	300 to 400 MHz	16	2

Customer Notes

A large rectangular area filled with a light blue grid pattern, intended for handwritten or typed customer notes. The grid is composed of small squares and is enclosed by a thin blue border.