

INDUCTORS, CURRENT SENSE INDUCTORS & TRANSFORMERS

INDUCTORS DESIGNED FOR NATIONAL'S SIMPLE SWITCHER™

260 kHz

Part Number		Inductance Nominal (µH ±20%)	Rated Current (Amps)	Nominal DCR (Ω)	Data Sheet
THT	SMT				
P0841	—	22.8	4.9	.036	PC503
P0845	—	10.2	4.3	.026	PC503
P0846	—	14.8	5.0	.023	PC503
P0847	—	10	5.0	.025	PC503
P0848	—	50	5.0	.050	PC503
P0849	—	33	5.0	.047	PC503
P0850	—	23	5.0	.026	PC503
—	P0841S	22.8	4.9	.036	PC503
—	P0845S	10	4.3	.026	PC503
—	P0846S	15	5.0	.027	PC503
—	P0847S	11	5.0	.025	PC503
—	P0848S	52	5.0	.025	PC503
—	P0849S	36	5.0	.019	PC503
—	P0850S	24.7	5.0	.013	PC503

150 kHz

PE-53801	PE-53801S	259	0.13	3.40	PC503
PE-53802	PE-53802S	178	0.16	2.80	PC503
PE-53803	PE-53803S	118	0.20	1.80	PC503
PE-53804	PE-53804S	79	0.25	1.50	PC503
PE-53805	PE-53805S	55	0.30	1.00	PC503
PE-53806	PE-53806S	39	0.34	0.80	PC503
PE-53807	PE-53807S	26	0.45	0.62	PC503
PE-53808	PE-53808S	374	0.20	2.70	PC503
PE-53809	PE-53809S	256	0.25	2.20	PC503
PE-53810	PE-53810S	176	0.30	1.40	PC503
PE-53811	PE-53811S	118	0.38	1.20	PC503
PE-53812	PE-53812S	78	0.46	0.80	PC503
PE-53813	PE-53813S	55	0.56	0.50	PC503
PE-53814	PE-53814S	39	0.68	0.30	PC503
PE-53815	PE-53815S	26	0.84	0.20	PC503
PE-53816	PE-53816S	17	1.02	0.10	PC503
PE-53817	PE-53817S	375	0.36	1.30	PC503
PE-53818	PE-53818S	252	0.44	0.90	PC503
PE-53819	PE-53819S	173	0.54	0.60	PC503
PE-53820	PE-53820S	115	0.67	0.40	PC503
PE-53821	PE-53821S	78	0.82	0.30	PC503
PE-53822	PE-53822S	54	1.00	0.20	PC503
PE-53823	PE-53823S	38	1.20	0.10	PC503
PE-53824	PE-53824S	26	1.48	0.10	PC503
PE-53825	PE-53825S	18	1.81	0.06	PC503
PE-53826	PE-53826S	377	0.68	1.00	PC503
PE-53827	PE-53827S	248	0.83	0.60	PC503
PE-53828	PE-53828S	168	1.02	0.40	PC503
PE-53829	PE-53829S	112	1.26	0.30	PC503
PE-53830	PE-53830S	77	1.54	0.20	PC503
PE-53831	PE-53831S	53	1.87	0.13	PC503
PE-53932	PE-53932S	37	2.24	0.10	PC503
PE-53933	PE-53933S	24	2.74	0.07	PC503
PE-53934	PE-53934S	17	3.00	0.05	PC503

150 kHz (continued)

Part Number		Inductance Nominal (µH ±20%)	Rated Current (Amps)	Nominal DCR (Ω)	Data Sheet
THT	SMT				
PE-53935	PE-53935S	250	1.50	0.23	PC503
PE-54036	PE-54036S	168	1.81	0.18	PC503
PE-54037	PE-54037S	114	2.22	0.10	PC503
PE-54038	PE-54038S	77	2.70	0.09	PC503
PE-54039	PE-54039S	53	3.00	0.08	PC503
PE-54040	PE-54040S	38	3.00	0.05	PC503
PE-54041	PE-54041S	25	3.00	0.04	PC503
PE-54042	—	167	2.50	0.14	PC503
PE-54043	—	110	3.00	0.09	PC503
PE-54044	PE-54044S	77	3.00	0.08	PC503
PE-53900	—	19	4.50	0.02	PC503
PE-53932	PE-53932S	37	2.24	0.10	PC503
PE-53933	PE-53933S	24	2.74	0.07	PC503
PE-53934	PE-53934S	17	3.00	0.05	PC503
PE-53935	PE-53935S	250	1.50	0.23	PC503
PE-54036	PE-54036S	168	1.81	0.18	PC503
PE-54037	PE-54037S	114	2.22	0.10	PC503
PE-54038	PE-54038S	77	2.70	0.09	PC503
PE-54039	PE-54039S	53	3.00	0.08	PC503
PE-54040	PE-54040S	38	3.00	0.05	PC503
PE-54041	PE-54041S	25	3.00	0.04	PC503
PE-54042	—	167	2.50	0.14	PC503
PE-54043	—	110	3.00	0.09	PC503
PE-54044	PE-54044S	77	3.00	0.08	PC503
PE-53900	—	19	4.50	0.02	PC503

50 kHz

Part Number	Inductance Typical (µH)	I _{DC} (Amps)	Inductance No. DC (µH ±20%)	Package L/W/H (in.)	Data Sheet
PE-53122	2200	0.42	1730	1.440 / .800 / 1.440	PC503
PE-53121	1500	0.62	1150	1.440 / .800 / 1.440	PC503
PE-53114	470	0.64	426	.950 / .600 / 1.000	PC503
PE-52629	680	0.85	657	.710 / .710 / .460	PC503
PE-53146	330	0.90	267	.830 / .450 / .950	PC503
PE-52627	330	0.90	302	.710 / .710 / .460	PC503
PE-53120	1000	0.95	762	1.300 / .700 / 1.400	PC503
PE-53119	680	1.30	562	1.300 / .700 / 1.400	PC503
PE-53145	220	1.40	176	.830 / .450 / .950	PC503
PE-52626	220	1.40	230	.710 / .710 / .460	PC503
PE-53113	150	2.00	130	.950 / .600 / 1.000	PC503
PE-53118	470	2.00	369	1.300 / .700 / 1.400	PC503
PE-53112	47	3.00	38	.650 / .450 / .700	PC503
PE-53115	150	3.00	136	.950 / .600 / 1.000	PC503
PE-53116	220	3.00	167	1.300 / .700 / 1.400	PC503
PE-53117	330	3.00	292	1.300 / .700 / 1.400	PC503
PE-92114K ¹	68	3.00	55	.950 / .600 / 1.000	PC503
PE-92108K ¹	100	3.00	91	.950 / .600 / 1.000	PC503

1. (K) Klipmount package dimensions – see Power Catalog PC503.

CURRENT SENSE INDUCTORS & TRANSFORMERS

Low Profile, Surface Mount Transformers

Part Number*	Secondary Turns	Secondary Inductance	Rated Current	Package L/W/H (in.)**	Data Sheet
P8202	20	80 µH	6.0	.330 / .280 / .190	P523
P8203	30	180 µH	6.0	.330 / .280 / .190	P523
P8204	40	320 µH	6.0	.330 / .280 / .190	P523
P8205	50	500 µH	6.0	.330 / .280 / .190	P523
P8206	60	720 µH	6.0	.330 / .280 / .190	P523
P8207	70	980 µH	6.0	.330 / .280 / .190	P523
P8208	100	2000 µH	6.0	.330 / .280 / .190	P523
P8209	125	3000 µH	6.0	.330 / .280 / .190	P523
PE-68210	50	3.8 mH	15.3	.575 / .495 / .280	PC502
PE-68280	100	14.8 mH	16.3	.575 / .495 / .280	PC502
PE-68383	200	59.2 mH	16.4	.575 / .495 / .280	PC502

UL/C-UL Recognized, Through Hole Transformers

Part Number	Primary Turns	Primary Inductance	I _{PEAK} (Amps)	Package L/W/H (in.)**	Data Sheet
P0581	200	76 mH	34	.810 / .580 / .750	PC502 / PC503
P0582	100	19 mH	35	.810 / .580 / .750	PC502 / PC503
P0583	50	5 mH	36	.810 / .580 / .750	PC502 / PC503

*Add "T" suffix to surface mount part number to indicate Tape & Reel packaging.
 **L/W/H is measured on surface mount parts tip to tip (height includes wash area).

SMT - Surface Mount Package THT - Through Hole Package

CURRENT SENSE INDUCTORS & TRANSFORMERS, INDUCTORS

CURRENT SENSE INDUCTORS & TRANSFORMERS (continued)

500 kHz, Through Hole Inductors & Transformers

Part Number	Secondary Turns	Secondary Inductance	IPEAK (Amps)	Package L/W/H (in.)	Data Sheet
INDUCTORS					
PE-52876	10	150.0 µH	20	.550 / .325 / .580	PC503
PE-52877	20	600.0 µH	20	.550 / .325 / .580	PC503
PE-52878	50	4000.0 µH	20	.550 / .325 / .580	PC503
TRANSFORMERS					
PE-64976	10	150.0 µH	20	.550 / .325 / .580	PC502
PE-64977	20	600.0 µH	20	.550 / .325 / .580	PC502
PE-64978	50	4000.0 µH	20	.550 / .325 / .580	PC502

VDE Approved, Through Hole Inductors & Transformers

Part Number	Secondary Turns	Secondary Inductance	IPEAK (Amps)	Package L/W/H (in.)	Data Sheet
TRANSFORMER WITH 2 - 1T PRIMARIES					
PE-64487	100	20.0 mH	20	.900 / .700 / .700	PC502
PE-64488	200	80.0 mH	20	.900 / .700 / .700	PC502
PE-64517	50CT	5.0 mH	20	.900 / .700 / .700	PC502
PE-64518	100CT	20.0 mH	20	.900 / .700 / .700	PC502
PE-64519	200CT	80.0 mH	20	.900 / .700 / .700	PC502
TRANSFORMER WITH 1T PRIMARY					
PE-63586	50	5.0 mH	20	.900 / .700 / .700	PC502
PE-63587	100	20.0 mH	20	.900 / .700 / .700	PC502
PE-63588	200	80.0 mH	20	.900 / .700 / .700	PC502

VDE Approved, Through Hole Inductors & Transformers (continued)

Part Number	Secondary Turns	Secondary Inductance	IPEAK (Amps)	Package L/W/H (in.)	Data Sheet
TRANSFORMER WITH 1T PRIMARY (CONTINUED)					
PE-63618	100CT	20.0 mH	20	.900 / .700 / .700	PC502
PE-63619	200CT	80.0 mH	20	.900 / .700 / .700	PC502
PE-63691	300CT	180.0 mH	20	.900 / .700 / .700	PC502
PE-67050	50	5.0 mH	35	.750 / .565 / .750	PC502
PE-67100	100	20.0 mH	37	.750 / .565 / .750	PC502
PE-67200	200	80.0 mH	38	.750 / .565 / .750	PC502
PE-67300	300	180.0 mH	37	.750 / .565 / .750	PC502
INDUCTOR WITHOUT PRIMARY					
PE-51686	50	5.0 mH	20	.670 / .390 / .800	PC503
PE-51687	100	20.0 mH	20	.670 / .390 / .800	PC503
PE-51688	200	80.0 mH	20	.670 / .390 / .800	PC503
PE-51717	50CT	5.0 mH	20	.670 / .390 / .800	PC503
PE-51718	100CT	20.0 mH	20	.670 / .390 / .800	PC503
PE-51719	200CT	80.0 mH	20	.670 / .390 / .800	PC503

FIS Series (Low Cost CSI)

Part Number	Secondary Turns	Secondary Inductance	IPEAK (Amps)	Package L/W/H (in.)	Data Sheet
FIS 101	50	5 mH	15	.677 / .375 / .803	P524
FIS 111	100	20 mH	15	.677 / .375 / .803	P524
FIS 121	200	80 mH	15	.677 / .375 / .803	P524

INDUCTORS

Standard Low Power Inductors

Part Number	Inductance Typical (µH)	I _{DC} (Amps)	Inductance No. DC (µH -12%, +20%)	Package L/W/H (in.)	Data Sheet
LOW PROFILE PACKAGE					
PE-52631	1000	.50	975	.710 / .710 / .460	PC503
PE-52630	820	.75	780	.710 / .710 / .460	PC503
PE-52629	680	.85	690	.710 / .710 / .460	PC503
PE-52628	470	.90	480	.710 / .710 / .460	PC503
PE-52627	330	1.00	316	.710 / .710 / .460	PC503
PE-52626	220	1.50	226	.710 / .710 / .460	PC503
PE-52625	150	1.70	145	.710 / .710 / .460	PC503
VERTICAL PACKAGE					
PE-52651	1000	.50	975	.710 / .510 / .710	PC503
PE-52650	820	.75	780	.710 / .510 / .710	PC503
PE-52649	680	.85	690	.710 / .510 / .710	PC503
PE-52648	470	.90	480	.710 / .510 / .710	PC503
PE-52647	330	1.00	316	.710 / .510 / .710	PC503
PE-52646	220	1.50	226	.710 / .510 / .710	PC503
PE-52645	150	1.70	145	.710 / .510 / .710	PC503

High Current Toroidal Inductors

Part Number	Inductance Typical (µH)	I _{DC} (Amps)	Inductance No. DC (µH -12%, +20%)	Package Diameter/Width (in.)	Data Sheet
PE-51520	400.0	3.6	688.0	1.600 / .800 / 1.720	PC503
PE-51516	98.0	6.0	188.0	1.600 / .800 / 1.720	PC503
PE-51517	175.0	6.0	315.0	1.950 / .900 / 2.000	PC503
PE-51518	335.0	6.0	571.0	2.300 / 1.110 / 2.300	PC503
PE-51514	32.0	6.5	60.5	1.200 / .600 / 1.200	PC503
PE-51515	52.0	7.0	92.0	1.440 / .800 / 1.440	PC503
PE-51509	14.0	10.0	28.5	1.200 / .600 / 1.200	PC503
PE-51511	43.0	10.0	85.5	1.600 / .800 / 1.720	PC503
PE-51512	90.0	10.0	158.0	1.950 / .910 / 2.000	PC503
PE-51513	144.0	10.0	262.0	2.300 / 1.110 / 2.300	PC503
PE-51510	23.0	11.0	43.5	1.440 / .800 / 1.440	PC503
PE-51507	32.0	16.0	70.7	1.950 / .910 / 2.000	PC503
PE-51508	60.0	16.0	120.0	2.300 / 1.110 / 2.300	PC503
PE-51506	17.0	17.0	40.0	1.600 / .800 / 1.720	PC503

Low Cost Inductors

Part Number	Klip ¹ Mount Option	Inductance Typical (µH)	I _{DC} (Amps)	Inductance No. DC (µH -12%, +20%)	Package Diameter/Width (in.)	Data Sheet
BARE COIL VERTICAL MOUNT - THT						
PE-51591		20	2.0	32.8	.640 / .280	PC503
PE-92100	K	25	2.6	20.7	.550 / .250	PC503

Low Cost Inductors (continued)

Part Number	Klip ¹ Mount Option	Inductance Typical (µH)	I _{DC} (Amps)	Inductance No. DC (µH -12%, +20%)	Package Diameter/Width (in.)	Data Sheet
BARE COIL VERTICAL MOUNT - THT (CONTINUED)						
PE-92101	K	50	2.6	45.7	.700 / .380	PC503
PE-92102	K	100	2.6	94.1	.850 / .410	PC503
PE-92103	K	35	2.6	28.4	.700 / .380	PC503
PE-92104	K	70	3.0	61.0	.850 / .410	PC503
PE-92105	K	145	3.0	141.8	1.050 / .550	PC503
PE-92106	K	285	3.0	264.1	1.400 / .700	PC503
PE-92107	K	450	3.0	436.3	1.650 / .700	PC503
PE-92108	K	100	3.6	90.7	1.050 / .550	PC503
PE-92109	K	165	4.0	152.0	1.400 / .700	PC503
PE-92110	K	270	4.0	263.9	1.650 / .700	PC503
PE-92111	K	40	4.0	37.9	.850 / .410	PC503
PE-51590		22	5.0	20.3	.850 / .330	PC503
PE-92112	K	100	5.0	90.7	1.400 / .700	PC503
PE-92113	K	170	5.0	159.7	1.650 / .700	PC503
PE-92114	K	55	5.0	54.9	1.050 / .550	PC503
PE-92115	K	95	7.0	96.0	1.650 / .700	PC503
PE-92116	K	55	7.0	49.1	1.400 / .700	PC503
PE-92117	K	55	10.0	55.9	1.650 / .700	PC503
BARE COIL LOW PROFILE PACKAGE - THT						
PE-92401		50	2.6	45.7	.700 / .380	PC503
PE-92402		100	2.6	94.1	.850 / .410	PC503
PE-92404		70	3.0	61.0	.850 / .410	PC503
PE-92405		145	3.0	141.8	1.050 / .550	PC503
PE-92408		100	3.6	90.7	1.050 / .550	PC503
PE-92412		100	5.0	90.7	1.400 / .700	PC503
PE-92414		55	5.0	54.9	1.050 / .550	PC503
PE-92416		55	7.0	49.1	1.400 / .700	PC503

1. (K) Klipmount package dimensions – see Power Catalog PC503.

High Inductance Toroidal Inductors

Part Number	Inductance Typical (mH)	I _{DC} (Amps)	Inductance No. DC (µH -12%, +20%)	Package Diameter/Width (in.)	Data Sheet
PE-50502	2.0	0.25	2.88	0.754 / 0.400	PC503
PE-50501	1.0	0.35	1.51	0.754 / 0.400	PC503
PE-50500	0.5	0.60	0.72	0.754 / 0.400	PC503
PE-50508	2.0	1.50	2.70	1.416 / 0.850	PC503
PE-50503	0.5	1.75	0.72	1.140 / 0.665	PC503
PE-50506	0.5	2.75	0.75	1.416 / 0.850	PC503

SMT - Surface Mount Package THT - Through Hole Package