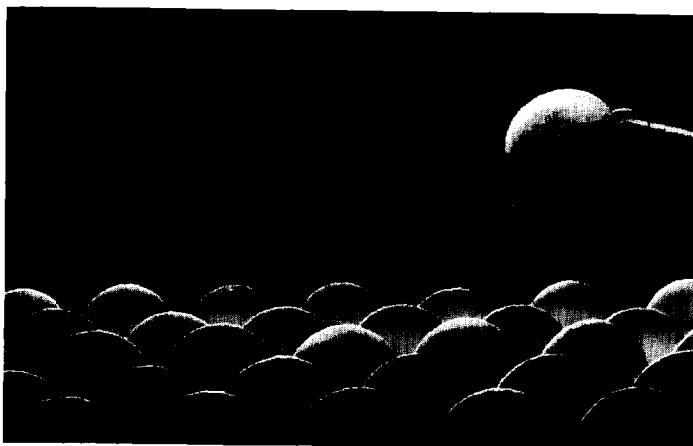


SERIES D AND S

2

Ceramic Capacitors

50VDC through 6KVDC, EIA Class I, II and III, General Purpose and Temperature Stable, Ceramic Disc Capacitors



DESCRIPTION:

Our General Purpose and Temperature Stable capacitors are available with DC Voltage ratings as high as 6KV. They may be subdivided into five different groupings of Standard Stock Items:

1. Low Voltage Standard Stock Items; This covers the range of 50VDC through 600VDC with Temperature Characteristics of Z5U and Z5V, they are typically used in non-critical bypass and coupling applications. Also included are Dual Capacitance units, which provide two capacitors within a single package, with a common center lead.
2. Temperature Stable Standard Stock Items: This covers a variety of 600VDC X5F and Z5P units. These items provide excellent temperature stability over a wide ambient temperature range.
3. Philips Components' Temperature Compensating Capacitors provide an accurate predictable linear capacitance change with variations in ambient temperature. This change is called Temperature Coefficient of Capacitance (TCC or TC) and is expressed in Parts-per-million-per-degree-Centigrade (PPM/°C). The Temperature Coefficient is determined from a two point measurement of the capacitance at +25°C and +85°C. The NPO (C0G) capacitor typical application includes tuned circuits, RF networks and other critical applications where the drift free performance of a temperature compensating capacitor is mandatory (NPO = 30PPM/°C).
4. 1 KDVC General Purpose Stock Items; This series provides a wide choice of 1000 Volt DC rated units for general purpose applications. These units are primarily designed for non-critical coupling, bypass and filter applications as found in all types of entertainment, industrial and medical equipment.
5. High Voltage Standard Stock Items: This series includes 1400VDC/150VAC units as well as 1600VDC, 3000VDC and 6000VDC units. These units are especially useful for filtering, blocking, voltage multiplier applications and for arc and noise suppression on switches, relays and motors.

SERIES D AND S

50VDC through 6KVDC, EIA Class I, II and III, General Purpose and Temperature Stable, Ceramic Disc Capacitors

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Ceramic Capacitors

CAPACITANCE:

Measured @ 1MHz @ 1.0 ± 0.2 VRMS @ 25°C for values 1000 pF or less.

Measured @ 1MHz @ 1.0 ± 0.2 VRMS @ 25°C for S2L and S3N Temperature Characteristics.

Measured @ 1KHz @ 1.0 ± 0.2 VRMS @ 25°C for all others.

DISSIPATION FACTOR:

For Class I capacitors, dissipation factor is typically expressed as Q (Quality) Factor and is measured under the same conditions as capacitance.

$Q = 1/DF$ or $DF = 1/Q$ NPO (COG) = .1% DF.

.6% Max. when measured @ 1MHz @ 1.0 ± 0.2 VRMS @ 25°C for S2L and S3N Temperature Characteristics.

2.5% Max. when measured @ 1KHz @ 1.0 ± 0.2 VRMS @ 25°C for all others.

DIELECTRIC STRENGTH:

250% of Rated Voltage for units rated 500/600VDC or less, 200% of Rated Voltage for units rated 1KVDC, 175% of Rated Voltage for units rated over 1KVDC, with the test voltage being raised from zero to the specified value at a rate of approx. 500VDC per second and the maximum test voltage being maintained for 60 seconds; the limiting value of direct current shall be 50 milliAmps for both charging and discharging.

INSULATION RESISTANCE:

10,000 Meg Ω minimum when measured at rated Voltage or 500VDC, whichever is less, after 2 minutes, ± 5 seconds charge time, with charging current limited to 50 milliAmps.

MARKING:

Philips Components Logo (Diamond Shape), Capacitance Value (in Micro-Farad), EIA Capacitance Tolerance Code, Rated Voltage, EIA Temperature Characteristic (in this order, as size permits). 50 Volt rated units may have capacitance value marking underlined to denote 50VDC rating.

ENCAPSULATION:

Phenolic Resin, Golden/Yellow colored for units less than 3000VDC, Epoxy, Golden colored for 3000VDC and higher, coating material is at Philips Components' option.

OPERATING TEMPERATURE RANGE

-55°C to +125°C.

PACKAGING:

Both Bulk and Radial Tape and Reel (per EIA RS-468) product available. Taped and Reeled product available on 2000 pc reels only.

LEADFORMS:

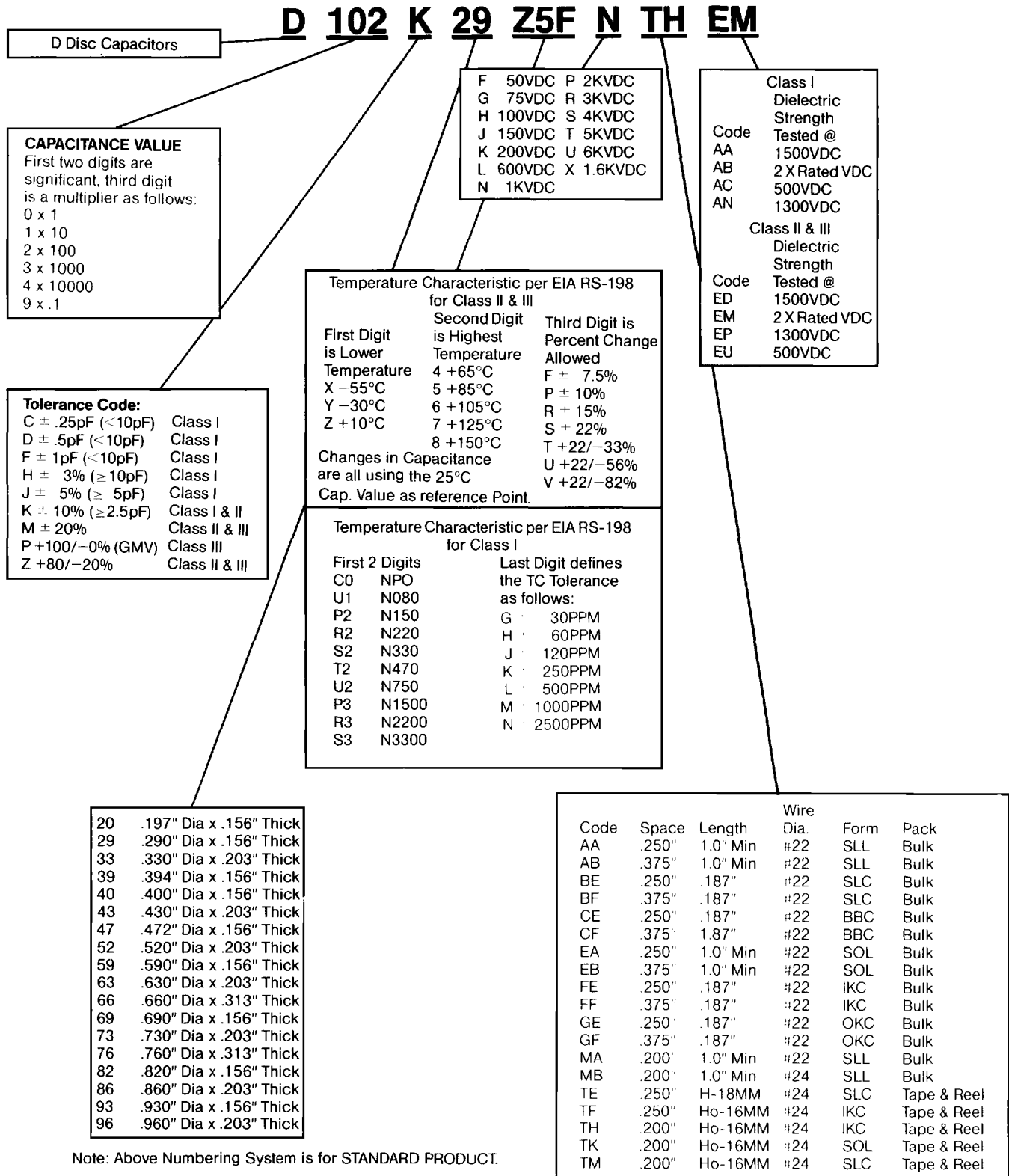
Taped and reeled product available with 5mm (.197") nominal spacing, #24 AWG CCS or CU wire 5.08mm (.200"), 6.35mm (.350"), IKC (standard), SOL (.200 only) or SLC.

CERAMIC CAPACITOR PART NUMBER SYSTEM

Ceramic Disc Capacitors

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Ceramic Capacitors



SERIES D AND S

50VDC through 6KVDC, EIA Class I, II and III, General Purpose and Temperature Stable, Ceramic Disc Capacitors

RANGE CHARTS

EIA Class I COG Disc Capacitors

Numbers reflect smallest STD Philips Components disc sizes.

		NPO/COG		
Standard Tolerance		Tol. 5%, 10%		
Standard Elect. Code		AC	AA	AB
Voltage		100	500	1KV
EIA CAPACITANCE VALUE CODE	159	20	20	20
	189	20	20	20
	229	20	20	20
	279	20	20	20
	339	20	20	20
	399	20	20	20
	479	20	20	20
	569	20	20	20
	689	20	20	20
	829	20	20	20
	919	20	20	20
	100	20	20	20
	120	20	20	20
	150	20	20	20
	180	20	20	20
	220	20	20	20
	270	20	29	29
	330	29	29	29
	390	29	29	29
	470	29	40	40
	560	29	40	40
	680	29	40	40
	820	40	40	40
	910	40	40	40
	101	40	40	40
	121	40	47	47
	151	40	59	59
	181	47	59	59
	221	47	59	59
	271	59	69	69
	331	59	82	82
	391	69	82	82

Size Codes:

20	.197" dia, .156" thick
29	.290" dia, .156" thick
39	.394" dia, .156" thick
40	.405" dia, .156" thick
47	.472" dia, .156" thick
59	.590" dia, .156" thick
69	.690" dia, .156" thick
82	.820" dia, .156" thick
93	.930" dia, .156" thick

EIA Class II and III Disc Capacitors:

Use the following chart to determine which Ceramic to use in order to obtain the desired Temperature Characteristics for Class II and III capacitors.

EIA TC	Maximum Capacitance Change Allowed	* Temp. Range	Use Ceramic	Standard Avail. Tol.
X5F	+/-7.5%	* -55°C to +85°C	T27 only	+/-10, +/-20%
X5P	+/-10%	-55°C to +85°C	T4 or T27	+/-10, +/-20%
X5R	+/-15%	-55°C to +85°C	T4 or T27	+/-10, +/-20%
X5S	+/-22%	-55°C to +85°C	T4 or T27	+/-10, +/-20%
X5T	+22/-33%	-55°C to +85°C	T4 or T27	+/-10, +/-20%
X5U	+22/-56%	-55°C to +85°C	T4, T27 or T32	+/-20, +80-20%
X5V	+22/-82%	-55°C to +85°C	T4, T27 or T32	+/-20, +80-20%
X7S	+/-22%	-55°C to +125°C	T27 only	+/-10, +/-20%
X7T	+22/-33%	-55°C to +125°C	T4 or T27	+/-20, +80-20%
X7U	+22/-56%	-55°C to +125°C	T4, T27 or T32	+/-20, +80-20%
X7V	+22/-82%	-55°C to +125°C	T4, T27 or T32	+/-20, +80-20%
Y5E	+/-4.7%	-30°C to +85°C	T27 only	+/-10, +/-20%
Y5F	+/-7.5%	-30°C to +85°C	T27 only	+/-10, +/-20%
Y5P	+/-10%	* -30°C to +85°C	T4 or T27	+/-10, +/-20%
Y5R	+/-15%	-30°C to +85°C	T4 or T27	+/-10, +/-20%
Y5S	+/-22%	-30°C to +85°C	T4 or T27	+/-10, +/-20%
Y5T	+22/-33%	-30°C to +85°C	T4 or T27	+/-20, +80-20%
Y5U	+22/-56%	-30°C to +85°C	T4, T27 or T32	+/-20, +80-20%
Y5V	+22/-82%	-30°C to +85°C	T4, T27, T32 or T66	+/-20, +80-20%
Z5E	+/-4.7%	+10°C to +85°C	T27 only	+/-10, +/-20%
Z5F	+/-7.5%	+10°C to +85°C	T4 or T27	+/-10, +/-20%
Z5P	+/-10%	* +10°C to +85°C	T4 or T27	+/-10, +/-20%
Z5R	+/-15%	+10°C to +85°C	T4 or T27	+/-10, +/-20%
Z5S	+/-22%	+10°C to +85°C	T4 or T27	+/-10, +/-20%
Z5T	+22/+33%	+10°C to +85°C	T4 or T27	+/-20, +80-20%
Z5U	+22/-56%	* +10°C to +85°C	T4, T27, T32 or T66	+/-20, +80-20%
Z5V	+22/-82%	* +10°C to +85°C	Any One Listed.	+/-20, +80-20%

* STANDARD Temperature Characteristics

After selecting ceramic see following pages to determine size from charts.

Special Sizes (Dual Disc Construction)

S62 .620" dia, .220" thick (Epoxy or Phenolic Coated, CRL option)

S72 .720" dia, .220" thick (Epoxy or Phenolic Coated, CRL option)

S85 .850" dia, .220" thick (Epoxy or Phenolic Coated, CRL option)

S95 .950" dia, .220" thick (Epoxy or Phenolic Coated, CRL option)

Note:

Voltages indicated are maximum operating voltages; use 100V column for 50V, etc.

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Ceramic Capacitors

SERIES D AND S

50VDC through 6KVDC, EIA Class I, II and III, General Purpose and Temperature Stable, Ceramic Disc Capacitors

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Ceramic Capacitors

How to use the Class II and Class III Selector Chart:

1. Look up the EIA TC Code required, or look up the Maximum Change in Capacitance Value over a certain Temperature Range allowed by the Circuit.
2. This will provide one (or more) Ceramic(s).
3. Now use the range chart and find the intersection of the capacitance Value desired and the Voltage desired (within the previously selected Ceramic).
4. The number found is the smallest size on which this product may be supplied.

An Example:

Requirements: 2200 pF $\pm 10\%$, Y5S, 100VDC, no larger than .500". We find that for Y5S we can use either T4 or T27 Ceramic. In the Range Chart, we find at the intersection of EIA Cap Code 222 and T27 Ceramic/100V, that "40" is listed. (Nothing is listed under T4 for this Cap Code, so that the T27 Ceramic is the only choice.) This means that the above described part can be supplied on a diameter of .394" Maximum, well within the .500" requirement. Where multiple Ceramics meet the same TC requirements, typically the smallest sizes are found under the Ceramic with the highest number.

CLASS II AND CLASS III DISC CAPACITORS

CLASS II; TC tolerance < $\pm 22\%$ (E, F, P, R)

CLASS III; TC tolerance = $\pm 22\%$ (S, T, U, V)

Common Electrical P/N Code Voltage	EIA CLASS II									EIA CLASS III								
	T4 CERAMIC			T27 CERAMIC			T32 CERAMIC			T66 CERAMIC			T82 CER.					
	EU	ED	EM	EU	ED	EM	EU	ED	EM	EU	ED	EM	EU	ED				
	100	500	1KV	100	500	1KV	100	500	1KV	100	500	1KV	100	500				
CODED CAPACITANCE VALUE	680	20	20	20														
	820	20	20	20														
	101	20	20	20														
	121				20	20	20											
	151				20	20	20											
	181				20	20	20											
	221				20	20	20											
	271				20	20	20											
	331				20	20	20											
	391				20	20	20											
	471				20	20	20											
	561				20	29	29	20	20	20								
	681				20	29	29	20	20	20								
	821				29	29	29	20	29	29			20	20				
	102				29	29	29	20	29	29			20	20				
	122				29	40	40	20	29	29			20	29				
	152				29	40	40	29	29	29	20	29	29					
	182				40	40	40	29	40	40	20	29	29					
	202				40	40	40	29	40	40	20	29	29					
	222				40	40	40	29	40	40	20	29	40					
	272				40	47	47	29	40	40	29	29	40	20				
	302				40	47	47	29	40	40	29	40	40	20				
	332				40	47	47	40	40	40	29	40	40	29				
	392				40	59	59	40	47	47	29	40	40	29				
	472				47	59	59	40	47	47	29	40	40	29				
	502				47	59	59	40	47	47	29	40	47	29				
	562				59	69	69	40	59	59	40	40	59	29				
	682				59	69	69	40	59	59	40	40	59	40				

Continued

SERIES D AND S

50VDC through 6KVDC, EIA Class I, II and III, General Purpose and Temperature Stable, Ceramic Disc Capacitors

CLASS II; TC tolerance < $\pm 22\%$ (E, F, P, R)

CLASS III; TC tolerance = > $\pm 22\%$ (S, T, U, V)

Common Electrical P/N Code Voltage	EIA CLASS II									EIA CLASS III					
	T4 CERAMIC			T27 CERAMIC			T32 CERAMIC			T66 CERAMIC			T82 CER.		
	EU	ED	EM	EU	ED	EM	EU	ED	EM	EU	ED	EM	EU	ED	
	100	500	1KV	100	500	1KV	100	500	1KV	100	500	1KV	100	500	
CODED CAPACITANCE VALUE	822			59	82	82	47	69	69	40	47	59	40		
	103			69	82	82	47	69	69	40	47	59	40		
	123				93	93	59	82	82	40	59	69	40	59	
	153						59	82	93	47	59	69	47	59	
	183									47	69	82	47	69	
	203									59	69	82	59	69	
	223									59	69	82	59	69	
	273									59	69	S72	59	69	
	303									69	S72	S85	69	S72	
	333									69	S72	S85	69	S72	
	393									69	S72	S85	69	S72	
	473									69	S72	S95	69	S72	
	503									69	S72	S95	69	S72	
	563									S62	S85		S62	S72	
	683									S62	S85		S62	S85	
	823									S72	S95		S72	S95	
	104									S72	S95		S72	S95	

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Ceramic Capacitors

SERIES D AND S

50VDC through 6KVDC, EIA Class I, II and III, General Purpose and Temperature Stable, Ceramic Disc Capacitors

STANDARD STOCK ITEMS

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Ceramic Capacitors

CAP.	NEW PART NUMBER	DIST. PART NUMBER	CAP. TOL.	TC CODE	MAX. DIA.	MAX. THICK.	LEAD SPACE	LEAD STYLE
50 Volt DCW								
.005 μ f	D502Z29Z5VFABEU	CK502	+80-20%	Z5V	.29"	.156"	.250"	SLL
.01 μ f	D103Z39Z5VFABEU	CK103	+80-20%	Z5V	.39"	.156"	.250"	SLL
.01 μ f	D103Z39Z5VFTHEU	—	+80-20%	Z5V	.39"	.140"	.200"	IKC*
.02 μ f	D203Z59Z5VFABEU	CK203	+80-20%	Z5V	.59"	.156"	.375"	SLL
.025 μ f	D253Z59Z5VFABEU	CK253	+80-20%	Z5V	.59"	.156"	.375"	SLL
.03 μ f	D303Z59Z5VFABEU	CK303	+80-20%	Z5V	.59"	.156"	.375"	SLL
.05 μ f	D503Z69Z5VFABEU	CK503	+80-20%	Z5V	.69"	.156"	.375"	SLL
.1 μ f	S104Z72Z5VFAZAA	CK104	+80-20%	Z5V	.72"	.171"	.375"	SLL
75 Volt DCW								
.05 μ f	D503X69Z5VGAZAA	DDA503	+80-30%	Z5V	.69"	.156"	.375"	SLL
.1 μ f	S104X72Z5VGAZAA	DDA104	+80-30%	Z5V	.72"	.171"	.375"	SLL
100 Volt DCW								
.005 μ f	D502M39Z5VHAABEU	DC502	$\pm$ 20%	Z5V	.39"	.156"	.250"	SLL
.005 μ f	D502M39Z5VHBEEU	XXDC502	$\pm$ 20%	Z5V	.39"	.156"	.250"	SLC
.01 μ f	D103M39Z5VHAABEU	DC103	$\pm$ 20%	Z5V	.39"	.156"	.250"	SLL
.01 μ f	D103M39Z5VHBEEU	XXDC103	$\pm$ 20%	Z5V	.39"	.156"	.250"	SLC
.01 μ f	D103M39Z5VHTHEU	—	$\pm$ 20%	Z5V	.39"	.140"	.200"	IKC*
.02 μ f	D203M59Z5VHABEU	DC203	$\pm$ 20%	Z5V	.59"	.156"	.375"	SLL
.02 μ f	D203M59Z5VHBFEU	XXDC203	$\pm$ 20%	Z5V	.59"	.156"	.375"	SLC
.025 μ f	D253M59Z5VHABEU	DC253	$\pm$ 20%	Z5V	.59"	.156"	.375"	SLL
.025 μ f	D253M59Z5VHBFEU	XXDC253	$\pm$ 20%	Z5V	.59"	.156"	.375"	SLC
.05 μ f	D503M69Z5VHABEU	DC503	$\pm$ 20%	Z5V	.69"	.156"	.375"	SLL
.05 μ f	D503M69Z5VHBFEU	XXDC503	$\pm$ 20%	Z5V	.69"	.156"	.375"	SLC
.1 μ f	S104M72Z5VHAZAA	DC104	$\pm$ 20%	Z5V	.72"	.171"	.375"	SLL
.1 μ f	S104S72Z5VHAZAA	DC104S	$\pm$ 30%	Z5V	.72"	.171"	.375"	SLL
100 Volt DCW COG (NPO)								
10 pf	D100J20C0GHMBAC	—	$\pm$ 5%	C0G	.20"	.138"	.200"	SLL
22 pf	D220J20C0GHMBAC	—	$\pm$ 5%	C0G	.20"	.138"	.200"	SLL
27 pf	D270J20C0GHMBAC	—	$\pm$ 5%	C0G	.20"	.138"	.200"	SLL
33 pf	D330J20C0GHMBAC	—	$\pm$ 5%	C0G	.20"	.138"	.200"	SLL
47 pf	D470J29C0GHMBAC	—	$\pm$ 5%	C0G	.29"	.138"	.200"	SLL
68 pf	D680J29C0GHMBAC	—	$\pm$ 5%	C0G	.29"	.138"	.200"	SLL
82 pf	D820J40C0GHMBAC	—	$\pm$ 5%	C0G	.40"	.138"	.200"	SLL
100 pf	D101J40C0GHMBAC	—	$\pm$ 5%	C0G	.40"	.138"	.200"	SLL
600 Volt DCW								
.01 μ f	D103P59Z5ULABED	DD6103	GMV	Z5U	.59"	.156"	.375"	SLL
.015 μ f	D153Z69Z5ULABED	DD153	+80-20%	Z5U	.69"	.156"	.375"	SLL
.02 μ f	D203Z69Z5ULABED	DD203	+80-20%	Z5U	.69"	.156"	.375"	SLL
.02 μ f	D203Z69Z5ULBFED	XXDD203	+80-20%	Z5U	.69"	.156"	.375"	SLC
.03 μ f	S303Z72Z5ULAZAA	DD303	+80-20%	Z5U	.72"	.250"	.375"	SLL
.04 μ f	S403Z72Z5ULAZAA	DD403	+80-20%	Z5U	.72"	.250"	.375"	SLL
.05 μ f	S503Z85Z5ULAZAA	DD503	+80-20%	Z5U	.85"	.250"	.375"	SLL
.05 μ f	S503Z85Z5ULBFED	XXDD503	+80-20%	Z5U	.85"	.250"	.375"	SLC
.1 μ f	S104Z95Z5VLAZAB	DD104	+80-20%	Z5U	.95"	.250"	.375"	SLL

*Tape and Reel Packaging

SERIES D AND S

50VDC through 6KVDC, EIA Class I, II and III, General Purpose
and Temperature Stable, Ceramic Disc Capacitors

STANDARD STOCK ITEMS

CAP.	NEW PART NUMBER	DIST. PART NUMBER	CAP. TOL.	TC CODE	MAX. DIA.	MAX. THICK.	LEAD SPACE	LEAD STYLE
600 Volt DCW C0G (NPO)								
1.5 pf	D159D20C0KLAAAA	DTZ1R5	±0.5pf	C0K	.20"	.156"	.250"	SLL
2.2 pf	D229D20C0KLAAAA	DTZ2R2	±0.5pf	C0K	.20"	.156"	.250"	SLL
3.3 pf	D339D20C0JLAAAA	DTZ3R3	±0.5pf	C0J	.20"	.156"	.250"	SLL
4.7 pf	D479D20C0JLAAAA	DTZ4R7	±0.5pf	C0J	.20"	.156"	.250"	SLL
6.8 pf	D689D20C0HLAAAA	DTZ6R8	±0.5pf	C0H	.20"	.156"	.250"	SLL
10 pf	D100J20C0GLAAAA	DTZ10	±5%	C0G	.20"	.156"	.250"	SLL
15 pf	D150J20C0GLAAAA	DTZ15	±5%	C0G	.20"	.156"	.250"	SLL
18 pf	D180J20C0GLAAAA	—	±5%	C0G	.20"	.156"	.250"	SLL
20 pf	D200J20C0GLAAAA	DTZ20	±5%	C0G	.20"	.156"	.250"	SLL
22 pf	D220J29C0GLAAAA	DTZ22	±5%	C0G	.29"	.156"	.250"	SLL
25 pf	D250J29C0GLAAAA	DTZ25	±5%	C0G	.29"	.156"	.250"	SLL
27 pf	D270J29C0GLAAAA	—	±5%	C0G	.29"	.156"	.250"	SLL
33 pf	D330J29C0GLAAAA	DTZ33	±5%	C0G	.29"	.156"	.250"	SLL
47 pf	D470J40C0GLAAAA	DTZ47	±5%	C0G	.40"	.156"	.250"	SLL
50 pf	D500J40C0GLAAAA	DTZ50	±5%	C0G	.40"	.156"	.250"	SLL
68 pf	D680J40C0GLAAAA	DTZ68	±5%	C0G	.40"	.156"	.250"	SLL
75 pf	D750J40C0GLABAA	DTZ75	±5%	C0G	.40"	.156"	.375"	SLL
82 pf	D820J40C0GLABAA	DTZ82	±5%	C0G	.40"	.156"	.375"	SLL
100 pf	D101J40C0GLABAA	DTZ100	±5%	C0G	.40"	.156"	.375"	SLL
120 pf	D121J47C0GLABAA	DTZ120	±5%	C0G	.47"	.156"	.375"	SLL
150 pf	D151J59C0GLABAA	DTZ150	±5%	C0G	.59"	.156"	.375"	SLL
200 pf	D201J59C0GLABAA	DTZ200	±5%	C0G	.59"	.156"	.375"	SLL
220 pf	D221J59C0GLABAA	DTZ220	±5%	C0G	.59"	.156"	.375"	SLL
Dual Capacitance 600 Volt DCW								
.001 μ f	S102P39Z5ULAZAA	DD3102	GMV	Z5U	.39"	.186"	.125"	SLL
.005 μ f	S502P59Z5ULAZAA	DD3502	GMV	Z5U	.59"	.225"	.125"	SLL
.01 μ f	S103P69Z5ULAZAA	DD3103	GMV	Z5U	.69"	.225"	.125"	SLL
600 Volt DCW X5F								
150 pf	D151K20X5FLAAEC	CE151	±10%		.20"	.156"	.250"	SLL
220 pf	D221K20X5FLAAEC	CE221	±10%		.20"	.156"	.250"	SLL
330 pf	D331K20X5FLAAEC	CE331	±10%		.20"	.156"	.250"	SLL
470 pf	D471K20X5FLAAEC	CE471	±10%		.20"	.156"	.250"	SLL
500 pf	D501K20X5FLAAEC	CE501	±10%		.20"	.156"	.250"	SLL
560 pf	D561K29X5FLAAEA	CE561	±10%		.29"	.156"	.250"	SLL
680 pf	D681K29X5FLAAEA	CE681	±10%		.29"	.156"	.250"	SLL
750 pf	D751K29X5FLAAEA	CE751	±10%		.29"	.156"	.250"	SLL
800 pf	D801K29X5FLAAEC	CE801	±10%		.29"	.156"	.250"	SLL
820 pf	D821K29X5FLAAEC	CE821	±10%		.29"	.156"	.250"	SLL
.001 μ f	D102K29X5FLAAEC	CE102	±10%		.29"	.156"	.250"	SLL
.0012 μ f	D122K39X5FLAAEC	CE122	±10%		.39"	.156"	.250"	SLL
.0015 μ f	D152K39X5FLAAEC	CE152	±10%		.39"	.156"	.250"	SLL
.0018 μ f	D182K39X5FLAAEC	CE182	±10%		.39"	.156"	.250"	SLL

2

Ceramic Capacitors

SERIES D AND S

50VDC through 6KVDC, EIA Class I, II and III, General Purpose and Temperature Stable, Ceramic Disc Capacitors

STANDARD STOCK ITEMS

2

Ceramic Capacitors

CAP.	NEW PART NUMBER	DIST. PART NUMBER	CAP. TOL.	TC CODE	MAX. DIA.	MAX. THICK.	LEAD SPACE	LEAD STYLE
600 Volt DCW X5F (continued)								
.002 μ f	D202K39X5FLAAEC	CE202	$\pm 10\%$	X5F	.39"	.156"	.250"	SLL
.0022 μ f	D222K39X5FLAAEC	CE222	$\pm 10\%$	X5F	.39"	.156"	.250"	SLL
.0033 μ f	D332K47X5FLABEC	CE332	$\pm 10\%$	X5F	.47"	.156"	.375"	SLL
.0039 μ f	D392K59X5FLABEC	CE392	$\pm 10\%$	X5F	.59"	.156"	.375"	SLL
.0047 μ f	D472K59X5FLABEC	CE472	$\pm 10\%$	X5F	.59"	.156"	.375"	SLL
.005 μ f	D502K69X5FLABED	CE502	$\pm 10\%$	X5F	.69"	.156"	.375"	SLL
.0062 μ f	D622K69X5FLABED	CE622	$\pm 10\%$	X5F	.69"	.156"	.375"	SLL
.0082 μ f	D822K82X5FLABEC	CE822	$\pm 10\%$	X5F	.82"	.156"	.375"	SLL
.01 μ f	D103K82X5FLABEA	CE103	$\pm 10\%$	X5F	.82"	.156"	.375"	SLL
600 Volt DCW Z5P								
.0012 μ f	D122K39Z5PLAAED	CF122	$\pm 10\%$	Z5P	.39"	.156"	.250"	SLL
.0015 μ f	D152K39Z5PLAAED	CF152	$\pm 10\%$	Z5P	.39"	.156"	.250"	SLL
.0018 μ f	D182K39Z5PLAAED	CF182	$\pm 10\%$	Z5P	.39"	.156"	.250"	SLL
.002 μ f	D202K39Z5PLAAED	CF202	$\pm 10\%$	Z5P	.39"	.156"	.250"	SLL
.0022 μ f	D222K39Z5PLAAEC	CF222	$\pm 10\%$	Z5P	.39"	.156"	.250"	SLL
.0033 μ f	D332K47Z5PLAAED	CF332	$\pm 10\%$	Z5P	.47"	.156"	.250"	SLL
.0039 μ f	D392K59Z5PLABED	CF392	$\pm 10\%$	Z5P	.59"	.156"	.375"	SLL
.0047 μ f	D472K59Z5PLABED	CF472	$\pm 10\%$	Z5P	.59"	.156"	.375"	SLL
.005 μ f	D502K59Z5PLABED	CF502	$\pm 10\%$	Z5P	.59"	.156"	.375"	SLL
.0062 μ f	D622K69Z5PLABED	CF622	$\pm 10\%$	Z5P	.69"	.156"	.375"	SLL
.0082 μ f	D822K82Z5PLABED	CF822	$\pm 10\%$	Z5P	.82"	.156"	.375"	SLL
.01 μ f	D103K82Z5PLABED	CF103	$\pm 10\%$	Z5P	.82"	.156"	.375"	SLL

SERIES D AND S

50VDC through 6KVDC, EIA Class I, II and III, General Purpose
and Temperature Stable, Ceramic Disc Capacitors

STANDARD STOCK ITEMS

CAP. VALUE	NEW PART NUMBER	DIST. PART NUMBER	CAP. TOL.	TC CODE	MAX. DIA.	MAX. THICK.	LEAD SPACE	LEAD STYLE
1000 Volt DCW								
3.3 pf	D339D20S2LNAAAL	DD3R3	± 0.5%	S2L	.20"	.156"	.250"	SLL
5 pf	D509K20S2LNAAAL	DD050	± 10%	S2L	.20"	.156"	.250"	SLL
6 pf	D609K20S2LNAAAL	DD060	± 10%	S2L	.20"	.156"	.250"	SLL
6.8 pf	D689K20S2LNAAAL	DD6R8	± 10%	S2L	.20"	.156"	.250"	SLL
7 pf	D709K20S2LNAAAL	DD070	± 10%	S2L	.20"	.156"	.250"	SLL
8 pf	D809K20S2LNAAAL	DD080	± 10%	S2L	.20"	.156"	.250"	SLL
10 pf	D100K20S2LNAAAL	DD100	± 10%	S2L	.20"	.156"	.250"	SLL
12 pf	D120K20S2LNAAAL	DD120	± 10%	S2L	.20"	.156"	.250"	SLL
15 pf	D150K20S2LNAAAL	DD150	± 10%	S2L	.20"	.156"	.250"	SLL
18 pf	D180K20S2LNAAAL	DD180	± 10%	S2L	.20"	.156"	.250"	SLL
20 pf	D200K20S2LNAAAL	DD200	± 10%	S2L	.20"	.156"	.250"	SLL
22 pf	D220K20S2LNAAAL	DD220	± 10%	S2L	.20"	.156"	.250"	SLL
24 pf	D240K20S2LNAAAL	DD240	± 10%	S2L	.20"	.156"	.250"	SLL
25 pf	D250K20S2LNAAAL	DD250	± 10%	S2L	.20"	.156"	.250"	SLL
27 pf	D270K20S2LNAAAL	DD270	± 10%	S2L	.20"	.156"	.250"	SLL
30 pf	D300K29S2LNAAAL	DD300	± 10%	S2L	.29"	.156"	.250"	SLL
33 pf	D330K29S2LNAAAL	DD330	± 10%	S2L	.29"	.156"	.250"	SLL
39 pf	D390K29S2LNAAAL	DD390	± 10%	S2L	.29"	.156"	.250"	SLL
47 pf	D470K29S2LNAAAL	DD470	± 10%	S2L	.29"	.156"	.250"	SLL
50 pf	D500K29S3NNAAAL	DD500	± 10%	S3N	.29"	.156"	.250"	SLL
51 pf	D510K29S3NNAAAL	DD510	± 10%	S3N	.29"	.156"	.250"	SLL
56 pf	D560K29S3NNAAAL	DD560	± 10%	S3N	.29"	.156"	.250"	SLL
68 pf	D680K29S3NNAAAL	DD680	± 10%	S3N	.29"	.156"	.250"	SLL
75 pf	D750K29S3NNAAAL	DD750	± 10%	S3N	.29"	.156"	.250"	SLL
82 pf	D820K29S3NNAAAL	DD820	± 10%	S3N	.29"	.156"	.250"	SLL
91 pf	D910K29S3NNAAAL	DD910	± 10%	S3N	.29"	.156"	.250"	SLL
100 pf	D101K29S3NNAAAL	DD101	± 10%	S3N	.29"	.156"	.250"	SLL
100 pf	D101K29S3NNBEAL	XXDD101	± 10%	S3N	.29"	.156"	.250"	SLC
100 pf	D101K29S3NNTHAL	—	± 10%	S3N	.29"	.156"	.200"	IKC*
120 pf	D121K29S3NNAAAL	DD121	± 10%	S3N	.29"	.156"	.250"	SLL
130 pf	D131K29S3NNAAAL	DD131	± 10%	S3N	.29"	.156"	.250"	SLL
150 pf	D151K29S3NNAAAL	DD151	± 10%	S3N	.29"	.156"	.250"	SLL
180 pf	D181K29S3NNAAAL	DD181	± 10%	S3N	.29"	.156"	.250"	SLL
200 pf	D201K29S3NNAAAL	DD201	± 10%	S3N	.29"	.156"	.250"	SLL
200 pf	D201K29S3NNBEAB	XXDD201	± 10%	S3N	.29"	.156"	.250"	SLC
220 pf	D221K20Z5FNAAEM	DD221	± 10%	Z5F	.20"	.156"	.250"	SLL
220 pf	D221K20Z5FNBEEM	XXDD221	± 10%	Z5F	.20"	.156"	.250"	SLC
240 pf	D241K20Z5FNAAEM	DD241	± 10%	Z5F	.20"	.156"	.250"	SLL
250 pf	D251K20Z5FNAAEM	DD251	± 10%	Z5F	.20"	.156"	.250"	SLL
270 pf	D271K20Z5FNAAEM	DD271	± 10%	Z5F	.20"	.156"	.250"	SLL
300 pf	D301K20Z5FNAAEM	DD301	± 10%	Z5F	.20"	.156"	.250"	SLL
330 pf	D331K20Z5FNAAEM	DD331	± 10%	Z5F	.20"	.156"	.250"	SLL
350 pf	D351K20Z5FNAAEM	DD351	± 10%	Z5F	.20"	.156"	.250"	SLL
360 pf	D361K20Z5FNAAEM	DD361	± 10%	Z5F	.20"	.156"	.250"	SLL
390 pf	D391K20Z5FNAAEM	DD391	± 10%	Z5F	.20"	.156"	.250"	SLL
400 pf	D401K20Z5FNAAEM	DD401	± 10%	Z5F	.20"	.156"	.250"	SLL

*Tape and Reel Packaging

SERIES D AND S

50VDC through 6KVDC, EIA Class I, II and III, General Purpose and Temperature Stable, Ceramic Disc Capacitors

STANDARD STOCK ITEMS

CAP. VALUE	NEW PART NUMBER	DIST. PART NUMBER	CAP. TOL.	TC CODE	MAX. DIA.	MAX. THICK.	LEAD SPACE	LEAD STYLE
1000 Volt DCW								
470 pf	D471K20Z5FNAAEM	DD471	±10%	Z5F	.20"	.156"	.250"	SLL
470 pf	D471K20Z5FNBEEM	XXDD471	±10%	Z5F	.20"	.156"	.250"	SLC
500 pf	D501K29Z5FNAAEM	DD501	±10%	Z5F	.29"	.156"	.250"	SLL
500 pf	D501K29Z5FNBEEM	XXDD501	±10%	Z5F	.29"	.156"	.250"	SLC
510 pf	D511K29Z5FNAAEM	DD511	±10%	Z5F	.29"	.156"	.250"	SLL
560 pf	D561K29Z5FNAAEM	DD561	±10%	Z5F	.29"	.156"	.250"	SLL
600 pf	D601K29Z5RNAAEM	DD601	±10%	Z5R	.29"	.156"	.250"	SLL
680 pf	D681K29Z5RNAAEM	DD681	±10%	Z5R	.29"	.156"	.250"	SLL
750 pf	D751K29Z5RNAAEM	DD751	±10%	Z5R	.29"	.156"	.250"	SLL
820 pf	D821K29Z5FNAAEM	DD821	±10%	Z5F	.29"	.156"	.250"	SLL
910 pf	D911K29Z5RNAAEM	DD911	±10%	Z5R	.29"	.156"	.250"	SLL
.001 µf	D102K29Z5FNAAEM	DD102	±10%	Z5F	.29"	.156"	.250"	SLL
.001 µf	D102K29Z5FNBEEM	XXDD102	±10%	Z5F	.29"	.156"	.250"	SLC
.001 µf	D102K29Z5FNTHM	—	±10%	Z5F	.29"	.156"	.200"	IKC*
.001 µf	D102P29Z5UNAAEM	DD102G	GMV	Z5U	.29"	.156"	.250"	SLL
.001 µf	D102P29Z5UNBEEM	XXDD102G	GMV	Z5U	.29"	.156"	.250"	SLC
.0012 µf	D122K39Z5RNAAEM	DD122	+10%	Z5R	.39"	.156"	.250"	SLL
.0013 µf	D132K39Z5RNAAEM	DD132	±10%	Z5R	.39"	.156"	.250"	SLL
.0015 µf	D152K39Z5RNAAEM	DD152	±10%	Z5R	.39"	.156"	.250"	SLL
.0015 µf	D152P29Z5UNAAEM	DD152G	GMV	Z5U	.29"	.156"	.250"	SLL
.0016 µf	D162K39Z5RNAAEM	DD162	±10%	Z5R	.39"	.156"	.250"	SLL
.0018 µf	D182K39Z5RNAAEM	DD182	±10%	Z5R	.39"	.156"	.250"	SLL
.002 µf	D202M39Z5UNAAEM	DD202	±20%	Z5U	.39"	.156"	.250"	SLL
.002 µf	D202M39Z5UNBEEM	XXDD202	±20%	Z5U	.39"	.156"	.250"	SLC
.0022 µf	D222M39Z5UNAAEM	DD222	±20%	Z5U	.39"	.156"	.250"	SLL
.0025 µf	D252M39Z5UNAAEM	DD252	±20%	Z5U	.39"	.156"	.250"	SLL
.0027 µf	D272M39Z5UNAAEM	DD272	±20%	Z5U	.39"	.156"	.250"	SLL
.003 µf	D302M39Z5UNAAEM	DD302	±20%	Z5U	.39"	.156"	.250"	SLL
.0033 µf	D332M39Z5UNAAEM	DD332	±20%	Z5U	.39"	.156"	.250"	SLL
.0039 µf	D392M39Z5UNAAEM	DD392	±20%	Z5U	.39"	.156"	.250"	SLL
.004 µf	D402M39Z5UNAAEM	DD402	±20%	Z5U	.39"	.156"	.250"	SLL
.0043 µf	D432M47Z5UNAAEM	DD432	±20%	Z5U	.47"	.156"	.250"	SLL
.0047 µf	D472M47Z5UNAAEM	DD472	±20%	Z5U	.47"	.156"	.250"	SLL
.005 µf	D502M47Z5UNAAEM	DD5022	±20%	Z5U	.47"	.156"	.250"	SLL
.005 µf	D502P59Z5UNABEM	DD502	GMV	Z5U	.59"	.156"	.375"	SLL
.005 µf	D502P59Z5UNBFEM	XXDD502	GMV	Z5U	.59"	.156"	.375"	SLC
.0056 µf	D562M47Z5UNAAEM	DD562	±20%	Z5U	.47"	.156"	.250"	SLL
.0068 µf	D682M59Z5UNABEM	DD682	±20%	Z5U	.59"	.156"	.375"	SLL
.0075 µf	D752M59Z5UNABEM	DD752	±20%	Z5U	.59"	.156"	.375"	SLL
.0082 µf	D822M59Z5UNABEM	DD822	±20%	Z5U	.59"	.156"	.375"	SLL
.01 µf	D103M59Z5UNABEM	DD1032	±20%	Z5U	.59"	.156"	.375"	SLL
.01 µf	D103P69Z5UNABEM	DD103	GMV	Z5U	.69"	.156"	.375"	SLL
.01 µf	D103P69Z5UNBFEM	XXDD103	GMV	Z5U	.69"	.156"	.375"	SLC

*Tape and Reel Packaging

2

Ceramic Capacitors

SERIES D AND S

50VDC through 6KVDC, EIA Class I, II and III, General Purpose
and Temperature Stable, Ceramic Disc Capacitors

STANDARD STOCK ITEMS

CAP. VALUE	NEW PART NUMBER	DIST. PART NUMBER	CAP. TOL.	TC CODE	MAX. DIA.	MAX. THICK.	LEAD SPACE	LEAD STYLE
1400 Volt DCW/150 Volt AC RMS, 60Hz								
.0047 μ f	D472M82Z5UYAZAA	DI472	$\pm 20\%$	Z5U	.82"	.240"	.375"	SLL
.01 μ f	D103M82Z5UYAZAA	DI103	$\pm 20\%$	Z5U	.82"	.180"	.375"	SLL
1600 Volt DCW								
.003 μ f	D302P59Z5UXAZAA	DD16302	GMV	Z5U	.59"	.172"	.375"	SLL
.005 μ f	D502P59Z5UXAZAA	DD16502	GMV	Z5U	.59"	.172"	.375"	SLL
.006 μ f	D602P69Z5UXAZAA	DD16602	GMV	Z5U	.69"	.172"	.375"	SLL
.007 μ f	D702P69Z5UXAZAA	DD16702	GMV	Z5U	.69"	.172"	.375"	SLL
.01 μ f	D103P82Z5UXAZAA	DD16103	GMV	Z5U	.82"	.172"	.375"	SLL
.015 μ f	D153Z93Z5UXAZAA	DD16153	+80-20%	Z5U	.93"	.172"	.375"	SLL
3000 Volt DCW								
4.7 pf	D479M33S2LRAAAL	DD304R7	$\pm 20\%$	S2L	.33"	.180"	.250"	SLL
10 pf	D100M33S2LRAAAL	DD30100	$\pm 20\%$	S2L	.33"	.180"	.250"	SLL
15 pf	D150M33S2LRAAAL	DD30150	$\pm 20\%$	S2L	.33"	.180"	.250"	SLL
22 pf	D220M33S3NRAAAL	DD30220	$\pm 20\%$	S3N	.33"	.180"	.250"	SLL
30 pf	D300M33S3NRAAAL	DD30300	$\pm 20\%$	S3N	.33"	.203"	.250"	SLL
33 pf	D330M33S3NRAAAL	DD30330	$\pm 20\%$	S3N	.33"	.203"	.250"	SLL
47 pf	D470M33S3NRAAAL	DD30470	$\pm 20\%$	S3N	.33"	.203"	.250"	SLL
50 pf	D500M33S3NRAAAL	DD30500	$\pm 20\%$	S3N	.33"	.203"	.250"	SLL
68 pf	D680M33S3NRAAAL	DD30680	$\pm 20\%$	S3N	.33"	.203"	.250"	SLL
82 pf	D820M33S3NRAAAL	DD30820	$\pm 20\%$	S3N	.33"	.203"	.250"	SLL
100 pf	D101M33Z5URAAEM	DD30101	$\pm 20\%$	Z5U	.33"	.203"	.250"	SLL
150 pf	D151M33Z5URAAEM	DD30151	$\pm 20\%$	Z5U	.33"	.203"	.250"	SLL
200 pf	D201M33Z5URAAEM	DD30201	$\pm 20\%$	Z5U	.33"	.203"	.250"	SLL
220 pf	D221M33Z5URAAEM	DD30221	$\pm 20\%$	Z5U	.33"	.203"	.250"	SLL
250 pf	D251M33Z5URAAEM	DD30251	$\pm 20\%$	Z5U	.33"	.203"	.250"	SLL
270 pf	D271M33Z5URAAEM	DD30271	$\pm 20\%$	Z5U	.33"	.203"	.250"	SLL
300 pf	D301M33Z5URAAEM	DD30301	$\pm 20\%$	Z5U	.33"	.203"	.250"	SLL
330 pf	D331M33Z5URAAEM	DD30331	$\pm 20\%$	Z5U	.33"	.203"	.250"	SLL
390 pf	D391M33Z5URAAEM	DD30391	$\pm 20\%$	Z5U	.33"	.203"	.250"	SLL
470 pf	D471M33Z5URAAEM	DD30471	$\pm 20\%$	Z5U	.33"	.203"	.250"	SLL
500 pf	D501M33Z5URAAEM	DD30501	$\pm 20\%$	Z5U	.33"	.203"	.250"	SLL
680 pf	D681M33Z5URAAEM	DD30681	$\pm 20\%$	Z5U	.33"	.203"	.250"	SLL
750 pf	D751M33Z5URAAEM	DD30751	$\pm 20\%$	Z5U	.33"	.203"	.250"	SLL
820 pf	D821M43Z5URAAEM	DD30821	$\pm 20\%$	Z5U	.43"	.203"	.250"	SLL
.001 μ f	D102M43Z5URAAEM	DD30102	$\pm 20\%$	Z5U	.43"	.203"	.250"	SLL
.0012 μ f	D122M43Z5URAAEM	DD30122	$\pm 20\%$	Z5U	.43"	.203"	.250"	SLL
.0015 μ f	D152M63Z5URABEM	DD30152	$\pm 20\%$	Z5U	.63"	.203"	.375"	SLL
.002 μ f	D202M63Z5URABEM	DD30202	$\pm 20\%$	Z5U	.63"	.203"	.375"	SLL
.0022 μ f	D222M63Z5URABEM	DD30222	$\pm 20\%$	Z5U	.63"	.203"	.375"	SLL
.0027 μ f	D272M63Z5URABEM	DD30272	$\pm 20\%$	Z5U	.63"	.203"	.375"	SLL
.003 μ f	D302M63Z5URABEM	DD30302	$\pm 20\%$	Z5U	.63"	.203"	.375"	SLL
.0033 μ f	D332M63Z5URABEM	DD30332	$\pm 20\%$	Z5U	.63"	.203"	.375"	SLL
.0039 μ f	D392M73Z5URABEM	DD30392	$\pm 20\%$	Z5U	.73"	.203"	.375"	SLL
.0047 μ f	D472M73Z5URABEM	DD30472	$\pm 20\%$	Z5U	.73"	.203"	.375"	SLL
.005 μ f	D502M73Z5URABEM	DD30502	$\pm 20\%$	Z5U	.73"	.203"	.375"	SLL
.01 μ f	D103M96Z5URABEM	DD30103	$\pm 20\%$	Z5U	.96"	.203"	.375"	SLL

2

Ceramic Capacitors

SERIES D AND S

50VDC through 6KVDC, EIA Class I, II and III, General Purpose and Temperature Stable, Ceramic Disc Capacitors

STANDARD STOCK ITEMS

2

Ceramic Capacitors

CAP. VALUE	NEW PART NUMBER	DIST. PART NUMBER	CAP. TOL.	TC CODE	MAX. DIA.	MAX. THICK.	LEAD SPACE	LEAD STYLE
6000 Volt DCW								
10 pf	D100M66S2LUABAL	DD60100	±20%	S2L	.66"	.313"	.375"	SLL
15 pf	D150M66S2LUABAL	DD60150	±20%	S2L	.66"	.313"	.375"	SLL
30 pf	D300M66S3NUABAL	DD60300	±20%	S3N	.66"	.313"	.375"	SLL
39 pf	D390M66S3NUABAL	DD60390	±20%	S3N	.66"	.313"	.375"	SLL
47 pf	D470M66S3NUABAL	DD60470	±20%	S3N	.66"	.313"	.375"	SLL
50 pf	D500M66S3NUABAL	DD60500	±20%	S3N	.66"	.313"	.375"	SLL
75 pf	D750M66S3NUABAL	DD60750	±20%	S3N	.66"	.313"	.375"	SLL
82 pf	D820M66S3NUABAL	DD60820	±20%	S3N	.66"	.313"	.375"	SLL
100 pf	D101M66S3NUAZAA	DD60101	±20%	S3N	.66"	.313"	.375"	SLL
120 pf	D121M66S3NUABAL	DD60121	±20%	S3N	.66"	.313"	.375"	SLL
150 pf	D151M66S3NUABAL	DD60151	±20%	S3N	.66"	.313"	.375"	SLL
180 pf	D181M66Z5UUABEM	DD60181	±20%	Z5U	.66"	.313"	.375"	SLL
200 pf	D201M66Z5UUABEM	DD60201	±20%	Z5U	.66"	.313"	.375"	SLL
220 pf	D221M66Z5UUABEM	DD60221	±20%	Z5U	.66"	.313"	.375"	SLL
250 pf	D251M66Z5UUABEM	DD60251	±20%	Z5U	.66"	.313"	.375"	SLL
300 pf	D301M66Z5UUABEM	DD60301	±20%	Z5U	.66"	.313"	.375"	SLL
390 pf	D391M66Z5UUABEM	DD60391	±20%	Z5U	.66"	.313"	.375"	SLL
470 pf	D471M66Z5UUABEM	DD60471	±20%	Z5U	.66"	.313"	.375"	SLL
500 pf	D501M66Z5UUABEM	DD60501	±20%	Z5U	.66"	.313"	.375"	SLL
750 pf	D751M66Z5UUABEM	DD60751	±20%	Z5U	.66"	.313"	.375"	SLL
820 pf	D821M66Z5UUABEM	DD60821	±20%	Z5U	.66"	.313"	.375"	SLL
.001 µf	D102M66Z5UUABEM	DD60102	±20%	Z5U	.66"	.313"	.375"	SLL
.0012 µf	D122M66Z5UUABEM	DD60122	±20%	Z5U	.66"	.313"	.375"	SLL
.0015 µf	D152M66Z5UUABEM	DD60152	±20%	Z5U	.66"	.313"	.375"	SLL
.002 µf	D202M76Z5UUABEM	DD60202	±20%	Z5U	.76"	.313"	.375"	SLL
.0022 µf	D222M76Z5UUABEM	DD60222	±20%	Z5U	.76"	.313"	.375"	SLL

SERIES D AND S

50VDC through 6KVDC, EIA Class I, II and III, General Purpose and Temperature Stable, Ceramic Disc Capacitors

Standard Disc Leadforms

2

Ceramic Capacitors

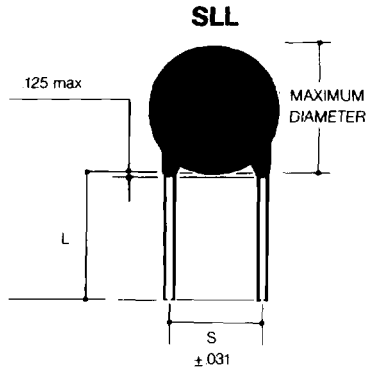


Fig 1 leadform available on all sizes and voltages, Bulk product only.

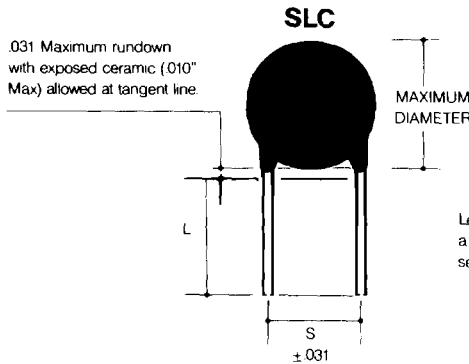


Fig 2 available on single disc construction, 1KV max rating, also avail. on Radial T & R.

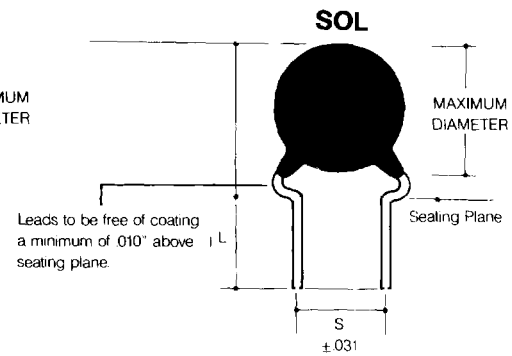


Fig 3 available on single disc construction, 1KV max rating, also avail. on Radial T & R.

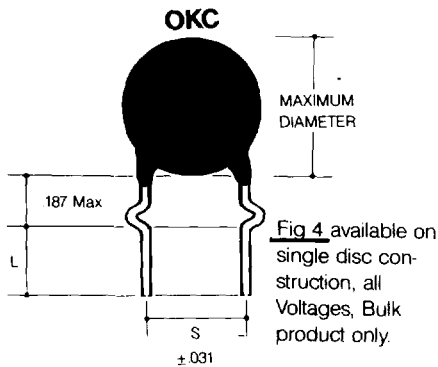


Fig 4 available on single disc construction, all Voltages, Bulk product only.

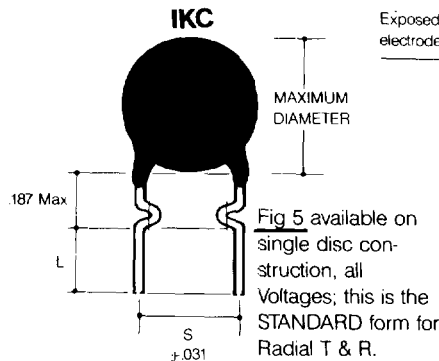


Fig 5 available on single disc construction, all Voltages; this is the STANDARD form for Radial T & R.

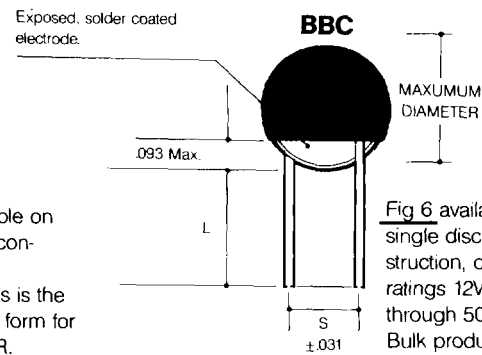


Fig 6 available on single disc construction, on Voltage ratings 12VDC through 500VDC, Bulk product only.

Note: 1 inch = 25.4 mm

Form	Definition
SLL =	Straight Lead, Standard
SLC =	Straight Lead, Controlled Run-down
SOL =	Stand Off Lead
OKC =	Outside Kink
IKC =	Inside Kink
BBC =	Bare Body Construction

SERIES D AND S

50VDC through 6KVDC, EIA Class I, II and III, General Purpose and Temperature Stable, Ceramic Disc Capacitors

WIRE FORMS AND SPACINGS AVAILABLE BY DISC SIZE.

Packaging	LeadForm/ Figure	Spacing (S)	Length (L)	AWG/Dia	Available on Size	P/N Code
BULK	SLL/1	.197"	1.00 MIN	22/.025	20 thru 47	MA
	SLL/1	.197"	1.00 MIN	24/.020	20 thru 59	MB
	SLL/1	.250"	1.00 MIN	22/.025	20 thru 59	AA
	SLL/1	.375"	1.00 MIN	22/.025	29 thru 96	AB
	SLC/2	.197"	1.00 MIN	24/.020	20 thru 59	MD
	SLC/2	.197"	.197+.031/- .016	24/.020	20 thru 47	MF
	SLC/2	.250"	1.00 MIN	22/.025	20 thru 59	BA
	SLC/2	.250"	.187+.031/- .016	22/.025	20 thru 47	BE
	SLC/2	.375"	1.50 MIN	22/.025	29 thru 93	BB
	SLC/2	.375"	.187+.031/- .016	22/.025	29 thru 93	BF
	SOL/3	.197"	.197+.031/+ .016	24/.020	20 thru 47	MM
	SOL/3	.250"	1.00 MIN	22/.025	20 thru 47	EB
	SOL/3	.250"	.165+.031/- .016	22/.025	20 thru 47	EG
	SOL/3	.250"	.187+.031/- .016	22/.025	20 thru 47	EE
	SOL/3	.375"	1.00 MIN	22/.025	29 thru 93	EA
	SOL/3	.375"	.165+.031/- .016	22/.025	29 thru 47	EH
	SOL/3	.375"	.187+.031/- .016	22/.025	29 thru 93	EF
	OKC/4	.250"	1.00 MIN	22/.025	20 thru 47	GC
	OKC/4	.250"	.187+.031/- .016	22/.025	29 thru 47	GE
	OKC/4	.375"	1.00 MIN	22/.025	40 thru 93	GD
	OKC/4	.375"	.187+.031/- .016	22/.025	59 thru 93	GF
	IKC/5	.197"	.197+.031/- .016	22/.025	20 thru 47	MT
	IKC/5	.250"	1.00 MIN	22/.025	20 thru 47	FC
	IKC/5	.250"	.187+.031/- .016	22/.025	20 thru 47	FE
	IKC/5	.375"	1.00 MIN	22/.025	59 thru 93	FD
	IKC/5	.375"	.187+.031/- .016	22/.025	59 thru 93	FF
	BBC/6	.250"	1.00 MIN	22/.025	20 thru 47	CA
	BBC/6	.250"	.165+.031/- .016	22/.025	20 thru 47	CN
	BBC/6	.250"	.187+.031/- .016	22/.025	20 thru 47	CE
	BBC/6	.375"	1.00 MIN	22/.025	59 thru 93	CB
	BBC/6	.375"	.165+.031/- .016	22/.025	59 thru 93	CP
	BBC/6	.375"	.187+.031/- .016	22/.025	20 thru 93	CF
RADIAL TAPE AND REEL	SLC/2	.197"	H IS 17 to 19.5MM	24/.020	20 thru 47	TM
	SOL/3	.197"	Ho IS 16 to .5MM	24/.020	20 thru 47	TK
	IKC/5	.197"	Ho IS 16 to .5MM	24/.020	20 thru 47	TH
	SLC/2	.250"	Ho IS 17 to 19.5MM	24/.020	20 thru 47	TE
	IKC/5	.250"	H IS 16 to .5MM	24/.020	20 thru 47	TF

2

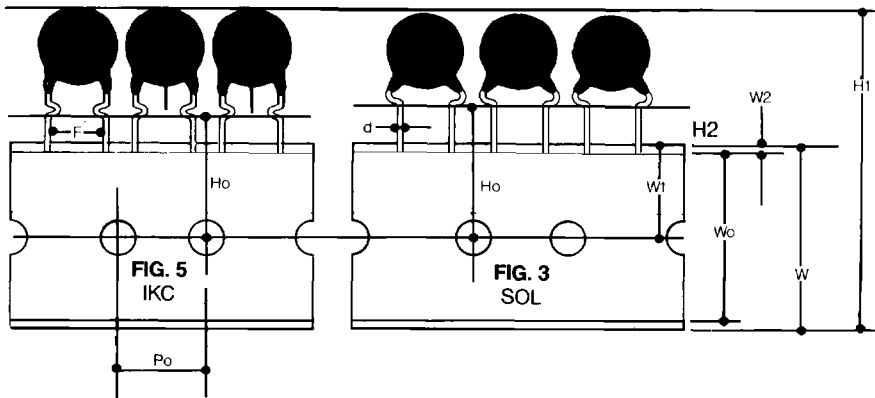
Ceramic Capacitors

DISC CAP TAPE & REEL

TAPE & REEL DIMENSIONS

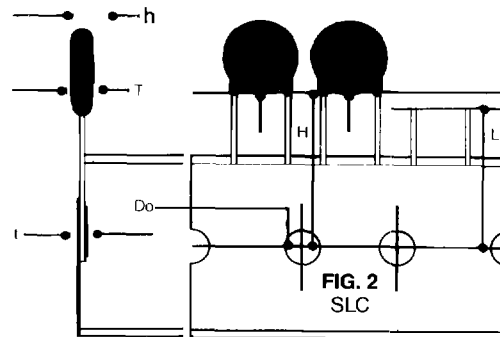
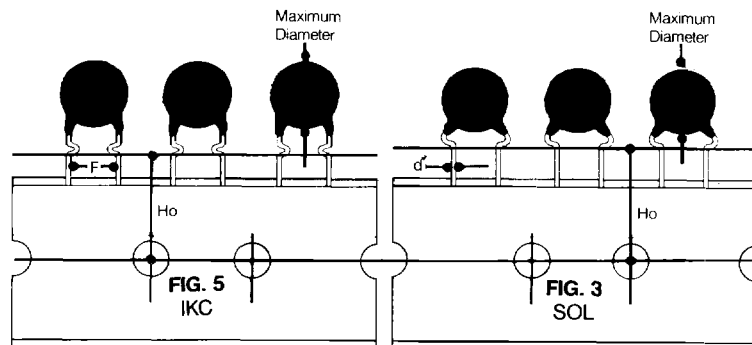
DESCRIPTION	SYMBOL	METRIC DIMENSION	REFERENCE DIM'S IN INCHES
Body Diameter (Discs)	A	12,0Max	.476ref
Body Thickness	T	4,0Max	.157ref
Wire Lead Dia.	d	.45/.65	#24 AWG Cu.
Taping Pitch	P	12,7Ref	.500ref
Feed Hole Pitch (Note 1)	Po	12,7 ± 0,3 (Note 1)	.500ref
Feed Hole Off Alignment (200 L/5)	P1/P2	3,85 ± 0,7/6,35 ± 1,3	.152ref/.25ref
Feed Hole Off Alignment (.250 L/5)	P1/P2	3.10 ± 0.6/6.35 ± 1.3	.122 ± .024/.25 ± .051
Lead Spacing	F	5,0 + 0,8/-0,2 16.35 ± 0.7MM	.197ref/.250ref
Body Inclination	h	0 ± 1,0	0 ± .039ref
Carrier Tape Width	W	18,0 + 1,0/-0,5	.709ref
Adhesive Tape Width	Wo	13,0Ref	.512ref
Feed Hole Ht off Alignment	W1	9,0 + 0,75/-0,5	.354ref
Adhesive Tape Margin	W2	3,0 ± 3,0	.118ref
Straight Lead Height	H	17,0Min/19,5Max	.67/.76ref
Lead Crimp Height	Ho	16,0 ± 0,5	.63ref
Top of Component Height	H1	23,0Min/32,25Max	.91/1.27ref
Clean, Parallel Lead Length	H2	6,0ref	.236ref
Lead End Protrusion	l	2,0Max	.078ref
Feed Hole Diameter	Do	4,0 ± 0,3	.157ref
Overall Tape Thickness	t	0,9Max	.035ref
Rejected Component Cut Height	L	10,0Max	.394ref

Note: 1 Inch = 25.4 mm



Note:

1. 1 Inch = 25.4mm
2. Cumulative pitch tolerance over 20 consecutive units not to exceed ± 1.0mm.
3. Dimensions meet requirements defined in EIA RS468.
4. "H2" defines the useable portion of the lead for insertion equipment purposes: the leads in this area to be straight and parallel. They shall be @ 90° ± 3° to the top edge of the carrier tape and shall also be parallel to each other to within 3°. Deformation, if any, shall not exceed 3°. H2 is the straight lead portion of any formed wire and the "Free of coating" area of any non-formed wire.



SERIES D AND S

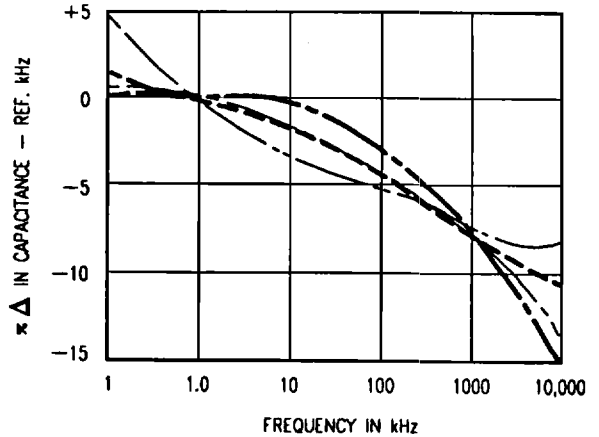
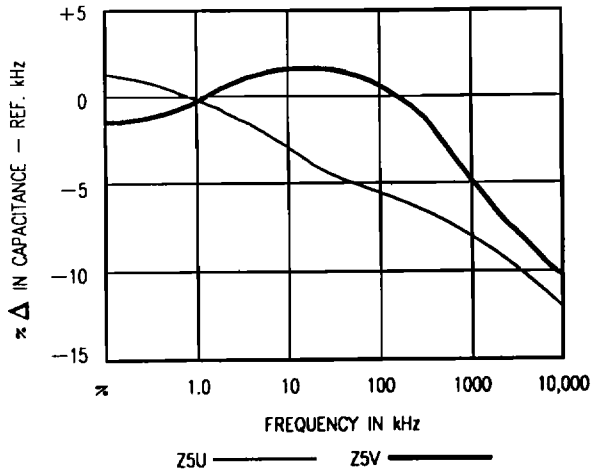
50VDC through 6KVDC, EIA Class I, II and III, General Purpose and Temperature Stable, Ceramic Disc Capacitors

DISC CAPACITORS TYPICAL CHARACTERISTICS

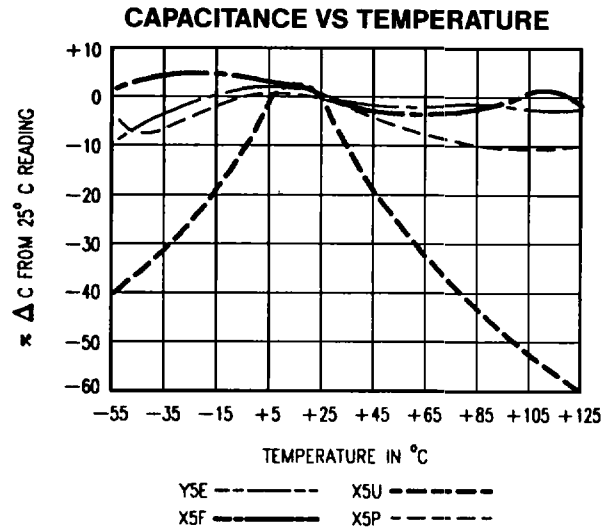
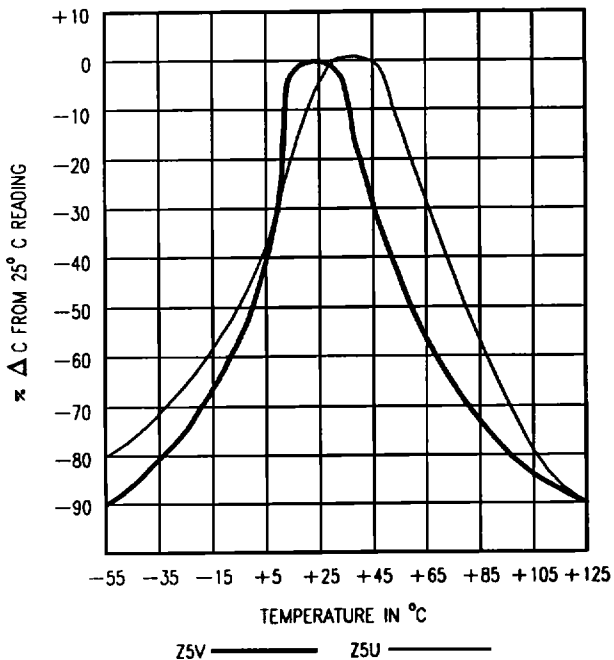
2

Ceramic Capacitors

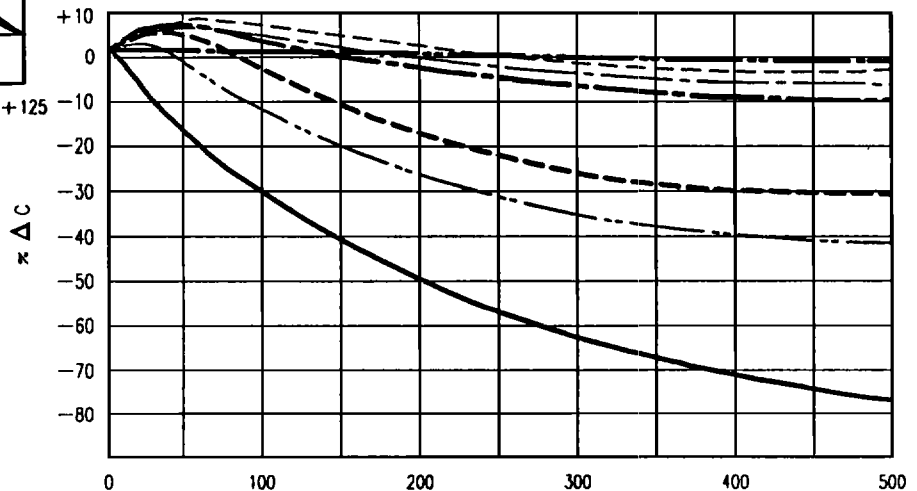
CAPACITANCE VS FREQUENCY



CAPACITANCE VS TEMPERATURE



Note: Class I Dielectrics vary with temperature on a PPM/°C basis. See Chart on disc part number system page.



CAPACITANCE VS DC VOLTS

VOLTS DC APPLIED

ALL T.C. ——— Y5E ——— X5U ——— Z5V ———
X5P ——— X5F ——— Z5U ———