

Disc Ceramic Capacitors



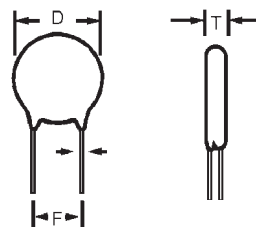
General Specifications - SL

CAPACITORS - CLASS SL

These capacitors have wide temperature characteristics but still offer low loss and linear type TC's.

They are specially designed to be smaller alternative to standard Class I capacitors of linear temperature coefficient.

Typical application is RF tuning and decoupling.



HOW TO ORDER

5K	K	101	K	A	B	A	A
Product Code	Voltage	Capacitance	Tolerance	Lead Forming	Capacitor Diameter	Finishing	Packaging

PERFORMANCE CHARACTERISTICS

	Low Voltage	High Voltage
Measured at	$C_R \leq 100 \text{ pF} \rightarrow 1\text{MHz}/1.0 \text{ Vrms} / 25^\circ\text{C}$ $C_R > 100 \text{ pF} \rightarrow 1\text{kHz}/0.3 \text{ Vrms} / 25^\circ\text{C}$	1.0kHz @ 0.3 Vrms / 25°C
Dissipation Factor (%)	$C_R \leq 100 \text{ pF} \dots 0.10\%$ 1MHz @ 1.0 Vrms $C_R > 100 \text{ pF} \dots 1.0\%$ 100kHz @ 0.3 Vrms $C_R > 100 \text{ pF} \dots 0.10\%$ 1kHz @ 0.3 Vrms	1MHz @ 1.0 Vrms 100kHz @ 0.3 Vrms 1kHz @ 0.3 Vrms
Tolerance	$C_R \leq 10 \text{ pF} \rightarrow \pm 0.25 \text{ pF}, \pm 0.5 \text{ pF}$ $C_R > 10 \text{ pF} \rightarrow \pm 5\%, \pm 10\%, \pm 20\%$	$C_R \leq 10 \text{ pF} \rightarrow \pm 0.25 \text{ pF}, \pm 0.5 \text{ pF}$ $C_R > 10 \text{ pF} \rightarrow \pm 5\%, \pm 10\%, \pm 20\%$
Temperature Coefficient	+350 ppm... -1500 ppm (P350... N1500)	
Insulation Resistance (IR)	@ $V_R \rightarrow \geq 10 \text{ G}\Omega$	@ 500V $\rightarrow \geq 10 \text{ G}\Omega$
Dielectric Strength NOTE: Charging current limited to 50 mA	@ $V_R = 100\text{V} \rightarrow V_t = 250\text{V (DC)}$ @ $V_R = 500\text{V} \rightarrow V_t = 1250\text{V (DC)}$	$1.5 \times V_R + 500 \text{ (DC)}$
dV/dt Test	up to 1.5 kV/ μsec	up to 10 kV/ μsec
Operating Temperature Range (°C)	-30... +85°C	-30... +125°C
Climatic Category	30 / 85 / 21 Phenolic Coated	30 / 85 / 56 Epoxy Coated

Note: Damp Heat Steady State: 90... 95% R.H. 40°C / 21 days. No voltage to be applied.

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Dimension Table - SL - Low Dissipation Class

SL – CAPACITANCE VS. DISC DIAMETER

millimeters (inches)									
Type	Phenolic Coating		Epoxy Coating						
Digits 1, 2, 3 of P.N.	5KK	5KQ	5KR	5KS	5KT				
Rated Voltage (V _R) C _R (pF)	100 VDC 50 VAC	500 VDC 100 VAC	1000 VDC 100 VAC	2000 VDC 150 VAC	3000 VDC 150 VAC				
1.0	5.0 (0.197)	5.0 (0.197)							
1.2									
1.5									
2.2									
2.7									
3.3									
3.9									
4.7									
5.6									
8.2									
10									
12									
15									
18									
22									
27									
33									
39						6.0 (0.236)	6.0 (0.236)	6.0 (0.236)	6.0 (0.236)
47									
56							8.0 (0.315)	8.0 (0.315)	8.0 (0.315)
68									
82		9.0 (0.354)	9.0 (0.354)						
100									
120		10.0 (0.394)	10.0 (0.394)						
150									
180		7.0 (0.276)	12.0 (0.472)	12.0 (0.472)					
220									
270	8.0 (0.315)	12.0 (0.472)	12.0 (0.472)						
330									
390									
470									
560	6.0 (0.236)	8.0 (0.315)	12.0 (0.472)	12.0 (0.472)					
680	7.0 (0.276)								
820	8.0 (0.315)								
1000	8.0 (0.315)								

Diameter (φ) = 9th Part Number Digit

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