

Disc Ceramic Capacitors



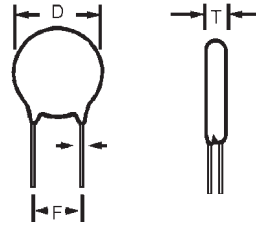
General Specifications - SL

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



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

Type Digits 1, 2, 3 of P.N.	millimeters (inches)				
	Phenolic Coating		Epoxy Coating		
Rated Voltage (V _R) C _R (pF)	5KK 100 VDC 50 VAC	5KQ 500 VDC 100 VAC	5KR 1000 VDC 100 VAC	5KS 2000 VDC 150 VAC	5KT 3000 VDC 150 VAC
1.0	5.0 (0.197)	5.0 (0.197)	5.0 (0.197)	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	5.0 (0.197)	6.0 (0.236)	6.0 (0.236)	6.0 (0.236)	6.0 (0.236)
33					
39					
47					
56					
68					
82					
100					
120					
150					
180					
220					
270					
330					
390					
470	7.0 (0.276)	7.0 (0.276)	7.0 (0.276)	7.0 (0.276)	7.0 (0.276)
560					
680					
820					
1000					
1000					
1000					
1000					
1000					
1000					
1000					
1000					
1000					
1000					
1000					
1000					

Diameter (φ) = 9th Part Number Digit

