

CERAMIC DISC CAPACITORS

CLASS II HIGH DIELECTRIC CONSTANT

FEATURES

- * Large capacitance in small sizes.
- * Non linear temperature coefficient of capacitance.

SPECIFICATIONS

- * Operating temperature range: $-25^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- * Rated working voltage: 50V.DC, 500V.DC.
- * Capacitance: Within the tolerance at 1 KHz, 1 to 3 V.rms, 25°C .
- * Test voltage: 2.5 times of the rated voltage.
- * Dissipation factor: $(\tan \delta)$:
 B, E characteristics: $\tan \delta \leq 2.5\%$ max.
 F characteristics: $\tan \delta \leq 5\%$ max.
- * Insulation resistance:
 $10,000\text{M}\Omega$ or $200 \text{M}\Omega\mu\text{F}$, whichever is the smaller.

* Temperature characteristics

Char. \ Item	Max. Capacitance Change From 25°C	Applicable Temperature Range	Applicable Standards	
			IEC pub. 384.9	EIA RS-198
B	$\pm 10\%$	-25 to $+85^{\circ}\text{C}$	2B4	Y5P
E	$+20, -55\%$	$+10$ to $+85^{\circ}\text{C}$	2E5	Z5U
F	$+30, -80\%$	$+10$ to $+85^{\circ}\text{C}$		

* Life test:

After application of 200% of the rated voltage for 1000 hours at 85°C , capacitor shall meet the following. Measurement shall be made after 24 hours exposure at room temperature.

Temp. Char. \ Item	B	E	F
Capacitance Change	$\pm 10\%$	$\pm 20\%$	$\pm 30\%$
Dissipation Factor	$\leq 50 \times 10^{-3}$		$\leq 75 \times 10^{-3}$
Insulation Resistance	$1000\text{M}\Omega$ or $20\text{M}\Omega\mu\text{F}$ whichever is less		

* Humidity test:

The capacitors shall be exposed in the ambient temperature of 40°C and at 95% R.H. for 500 hours. The capacitors shall meet the following after 24 hours exposure at room temperature.

Temp. Char. \ Item	B	E	F
Capacitance Change	$\pm 10\%$	$\pm 20\%$	$\pm 30\%$
Dissipation Factor	$\leq 50 \times 10^{-3}$		$\leq 75 \times 10^{-3}$
Insulation Resistance	$1000\text{M}\Omega$ or $20\text{M}\Omega\mu\text{F}$ whichever is less		