

CERAMIC DISC CAPACITORS

CLASS III SEMICONDUCTOR TYPE

FEATURES

- * Linear temperature characteristics of capacitance.
- * Stable capacitance change over the specified temperature.
- * Low loss at wide range of frequency.
- * Cost saving by replacing film capacitors.
- * Ultra large capacitance in small sizes.

SPECIFICATIONS

- * Operating temperature range: $-25^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- * Rated working voltage: 12V/16V/25V/50V/63V
- * Test voltage: 2.5 times of the rated voltage
- * Dissipation factor ($\tan \delta$): at 1 KHz, 0.1 Vrms, 25°C
 B, E, F: 12V/16V 7.5% max. 25V/50V 5% Max.
- * Insulation resistance: (at 25°C)
 12V/16V. $100\text{M}\Omega\mu\text{F}$ or $10\text{M}\Omega\mu\text{F}$ whichever is less
 25V/50V. $1000\text{M}\Omega\mu\text{F}$ or $20\text{M}\Omega\mu\text{F}$ whichever is less

* 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%	$+10^{\circ}$ to $+85^{\circ}\text{C}$	2E5	Z5U
F	+30, -80%	-25° to $+85^{\circ}\text{C}$	2F4	Y5V

* Load life test:

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

Temp. Char. \ Item	B	E	F
Capacitance Change	+10%	$\pm 20\%$	$\pm 30\%$
Dissipation Factor	5%		7.5%
Insulation Resistance	$500\text{M}\Omega$ or $50\text{M}\Omega\mu\text{F}$ whichever is less		$500\text{M}\Omega$ or $50\text{M}\Omega\mu\text{F}$ 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	7.5%		7.5%
Insulation Resistance	$500\text{M}\Omega$ or $50\text{M}\Omega\mu\text{F}$ whichever is less		$500\text{M}\Omega$ or $50\text{M}\Omega\mu\text{F}$ whichever is less