

## ■ HIGH VOLTAGE CERAMIC CAPACITOR

### Class 1: Temperature Compensation

1. Linear temperature coefficient of capacitance.
2. High stability of capacitance.
3. Low loss at wide range of frequency.

### Class 2: High Dielectric Constant

1. Non linear temperature coefficient of capacitance
2. Large capacitance in small sizes.

### Product Type

1. ( T - C ) 0.5PF ~ 821PF measured at 1MHz±10%, 1.0-5.0V rms, 25°C

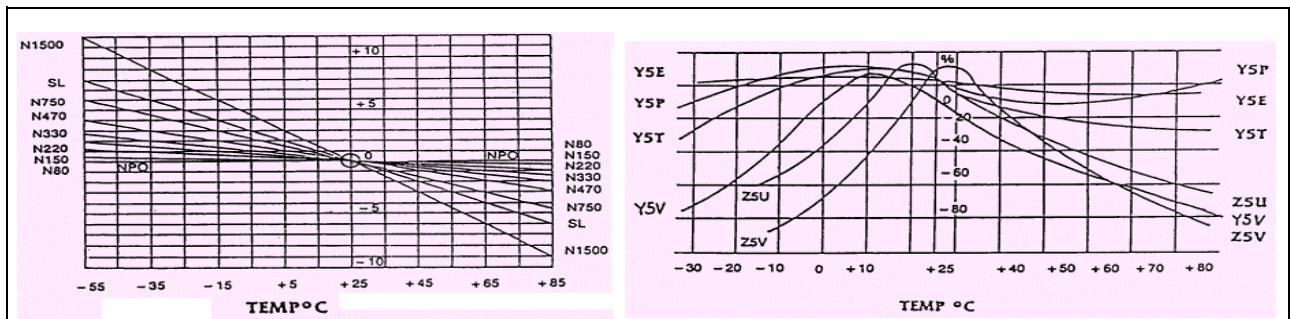
2. ( HI-K ) 100PF ~ 104PF measured at 1KHz±10%, 1.0-5.0V rms, 25°C



Temp. Range	- 25 °C to + 85 °C								
Working voltage (W.V.)	16V 25V 50VDC								
Test Condition	Rated working voltage 16V.25V.50VDC*2 times of the rated voltage (50mA and under) for 1 to 5 seconds								
Insulation Resistance (I R)	10000MΩ min.at rated voltage for 60±5 seconds		Not less than 10,000MΩ or (200/CR)MΩ whichever is the smaller CR:Capacitance(μF)						
Dissipation factor (DF)	NPO、SL		Y5P	Z5U	Z5V	Y5V			
	C ≥ 30 PF Q ≥ 1000		≤ 2.5%	≤ 2.5%	≤ 3.5%	≤ 5.0%			
	C < 30 PF Q ≥ 400 + 20 × C								
Tolerance	C	D	J	K	M	Z			
Code	±0.25 PF	±0.5 PF	± 5 %	± 10 %	± 20 %	+ 80% - 20%			
Operating Temp. Range	Type Code	Temperature Coefficient			Temp. Range				
	NPO	± 0 PPM			- 25 °C to + 85 °C				
	SL	+350 ~ -1000 PPM			- 25 °C to + 85 °C				
	Y5P	± 10%			- 25 °C to + 85 °C				
	Y5V	+22% ~ -82%			- 25 °C to + 85 °C				
	Z5U	+22% ~ -56%			- 10 °C to + 85 °C				
	Z5V	+22% ~ -82%			- 10 °C to + 85 °C				
The reference temperature: 25°C									
Rated Voltage (VDC)	Temp. char / capacitance range (pF)					Dimension ( mm )			
	NPO	SL	Y5P	Z5U	Z5V	D ( max )	F ( ±0.8 )	T ( max )	
CLASS 1~2 50V	0.5 ~ 39	23 ~ 51	101 ~ 821	202 ~ 472	232 ~ 103	5.0	2.5 / 5.0	3.0	
	47	51 ~ 221	102 ~ 222	-	333 ~ 473	6.0	2.5 / 5.0	3.0	
	51 ~ 101	221 ~ 331	232 ~ 332	205 ~ 103	-	7.0	2.5 / 5.0	3.0	
	121 ~ 221	341 ~ 471	342 ~ 682	-	-	9.0	2.5 / 5.0	3.0	
	271	501 ~ 681	822 ~ 103	-	-	11.0	2.5 / 5.0	3.0	
	331	821 ~ 102	-	-	-	12.0	2.5 / 5.0	3.0	

T-C. CHART

HI - K . CHART



## ■ HIGH VOLTAGE CERAMIC CAPACITOR

### **Class 3:Semi Conductive**

- 1. Linear temperature coefficient of capacitance.
  - 2. Low loss at wide range of frequency.
  - 3. Stable capacitance change over the specified temperature.
  - 4. Ultra large capacitance in small sizes.
  - 5. Cost saving by replacing film capacitors.



## Product Type

3. ( S - C ) 682PF ~ 224PF measured at 1KHz±10%, 0.1V rms, 25 °C

Temp. Range	- 25 °C to + 85 °C				
Working voltage (W.V.)	16V.DC	25V ~ 50V.DC			
Test Condition	Rated working voltage 16V.25V.50VDC*2 times of the rated voltage (50mA and under) for 1 to 5 seconds				
Insulation Resistance ( I R )	Not less than 100MΩ or (10/CR)MΩ whichever is the smaller CR:Capacitance(μF)		Not less than 1,000MΩ or (20/CR)MΩ whichever is the smaller CR:Capacitance(μF)		
Dissipation factor (DF)	Y5U	Y5V	Y5P	Y5U	Y5V
	≤ 7.5%	≤ 7.5%	≤ 5.0%	≤ 5.0%	≤ 5.0%
Temperature Coefficient	+22% ~ -56%	+22% ~ -82%	±10%	+22% ~ -56%	+22% ~ -82%
Tolerance	J	K	M	Z	P
Code	± 5 %	± 10 %	± 20 %	+ 80% - 20%	+ 100% - 0%

The reference temperature: 25°C

Rated Voltage (VDC)	Temp.char / capacitance range (pF)			Dimension ( mm )		
	Y5P	Y5U	Y5V	D (max)	F (±0.8)	T (max)
CLASS 3 16V~50V	682 ~ 103	153 ~ 503	333 ~ 403	6.0	2.5 / 5.0	3.0
	153 ~ 223	683 ~ 104	473 ~ 104	7.0	2.5 / 5.0	3.0
	273 ~ 333	104	104	8.0	2.5 / 5.0	3.0
	403 ~ 53	-	154 ~ 224	9.0	2.5 / 5.0	3.0
	683	154 ~ 224	155 ~ 224	10	2.5 / 5.0	3.0
	104	-	-	11	2.5 / 5.0	3.0

The size is usual goods, special request To conferred on the Side.

