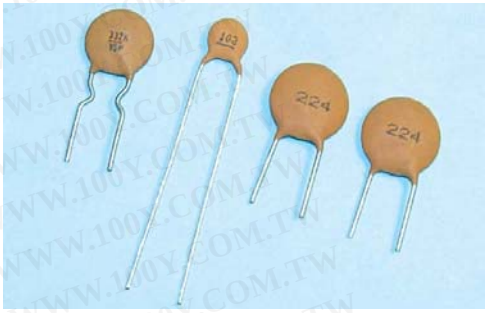
Ceramic Disc Capacitor

Class 1 Temperature Compensation



Features

- Linear Temperature coefficient of capacitance
- High Stability of capacitance
- Low loss at wide range of frequency

Specification	
Operating Temperature Range	-25°C to +85°C
Rated Working Voltage	DC 50V, 500V
Test Voltage	3 times of the rated voltage
Capacitance	Within the tolerance at 1MHz, 1±0.2 Vrms. 25°C
Q Factor	At 1Mhz: 1±0.2 Vrms, 25°C C > 30pF ..... Q > 1,000 C < 30pF ..... Q ≥ 400+20°C (C: Rated capacitance)
Insulation Resistance	10,000M ohm min.

Rated Volt. (VDC)	Temp. Char.	Capacitance Range (pF)	Capacitance Tolerance	Dimensions (mm) D max	T max	F
50	CH 0±60 PPM/°C (NPO)	0.5 ~ 47	±0.5pF (under 10 pF)	5.5	3.5	5.0
		50 ~ 75		6.5		
		82 ~ 100		7.5		
		120 ~ 150	±5% & ±10% (Over 10 pF)	8.5		
		180 ~ 270		10.5		
		300 ~ 390		12.5		5.0, 10.0
50	SL +350 ~ -1000PPM/°C	10 ~ 120	±5% & ±10%	5.5	3.5	5.0
		150 ~ 240		6.5		
		270 ~330		7.5		
		360 ~ 470		8.5		
		500 ~820		10.5		

Class 2 High Dielectric Constant

Features

- Large capacitance in small size
- Non liner temperature coefficient of capacitance

Specification	
Rated Working Voltage	DC 50V, 500V

Test Voltage	2.5 times of the rated voltage
Capacitance	Within the tolerance at 1MHz, 1±0.2 Vrms. 25°C
Dissipation Factor	Y5P, Z5U : tan§ < 2.5% Z5V : tan§ < 5%
Insulation Resistance	10,000M ohm or 200M ohm μF, whichever is the smaller

Rated Volt. (VDC)	Temp. Char.	Capacitance Range (pF)	Tolerance	Dimensions (mm) D max	T max	F
50	B ±10% (Y5P)	100 ~ 2000	±10% & ±20%	5.5	3.5	5.0
		2000 ~ 2700		6.5		
		3000 ~ 3300		7.5		
		3900 ~ 4700		8.5		
		5600 ~ 6800		10.5		
		10000				
50	E ±22 ~ 56% (Z5U)	2200 ~ 3300	±20 & +80-20%	5.5	3.5	5.0
		4700 ~ 5000				
		4600 ~ 6800		6.5		
		8200				
		10000		7.5		
		12000 ~ 15000		8.5		
		18000 ~ 20000		10.5		
		22000				
50	F ±22 ~82% (Z5V)	4700 ~ 5000	+80-20%	5.5	3.5	5.0
		10000 ~ 15000		6.5		
		18000 ~ 20000		7.5		
		20000 ~ 30000		8.5		
		33000 ~ 40000		10.5		

Class 3 Semi Conductive Type

Features

- Linear Temperature coefficient 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 size

Specification

Operating Temperature Range	-10°C to +85°C
Rated Working Voltage	DC 16V, 25V, 50V
Test Voltage	2 times of the rated voltage
Dissipation Factor Factor (tan §)	At 1Mhz: 0.1 Vrms, 25°C
FY	16V 7.5%max
FY. RY	25/50 5%max
Insulation Resistance	(at 25°C)
	16V, 100M ohm μF or M ohm μf whichever is less 25V/50V, 1000M ohm μF or 20 M ohm μF whichever is less

Rated Volt. (VDC)	Temp. Char.	Capacitance Range (pF)	Capacitance Tolerance	Dimensions (mm) D max	T max	F
50	FY +22 ~ 82% (Y5V)	20000 ~ 100000	±20% & +80-20%	5.5	3.5	5.0
		20000 ~ 220000		10.5		
25		22000		5.5		
		33000 ~ 100000		6.5		
		200000 ~ 220000		10.5		
50		22000		5.5		
		33000 ~ 47000		6.5		
		100000				
50	RY ±15% (Y5R)	6800 ~ 10000	±10 & ±20%	5.5	3.5	5.0
		15000 ~ 22000		6.5		
		33000 ~ 47000		7.5		
		68000 ~ 100000		8.5		
50		68000 ~ 10000		5.5		
		15000 ~ 22000		6.5		
		33000 ~ 47000		8.5		
		68000		10.5		