WEET®
We Enhance Efficiency

WSY Series

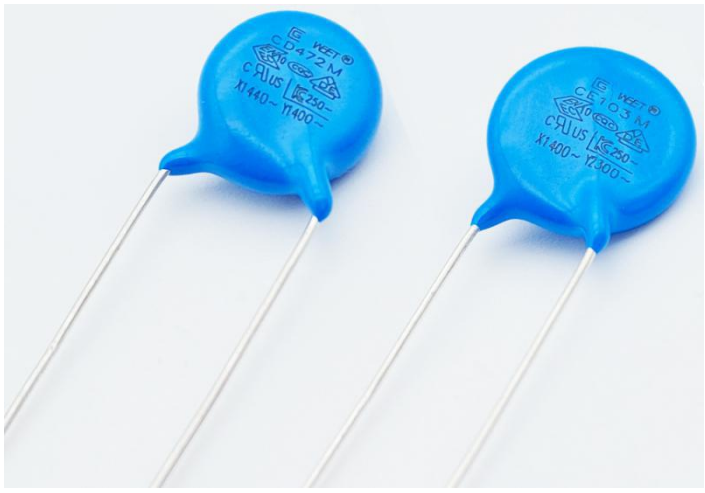
X1 / Y1(CD 400VAC) and Y2(CE 300VAC) Radial Disc Ceramic Capacitors

Safety Standard Recognized Capacitor - Y

AC Line Rated Ceramic Disc Capacitors

Class X1, 440VAC, Class Y1, 400VAC ,

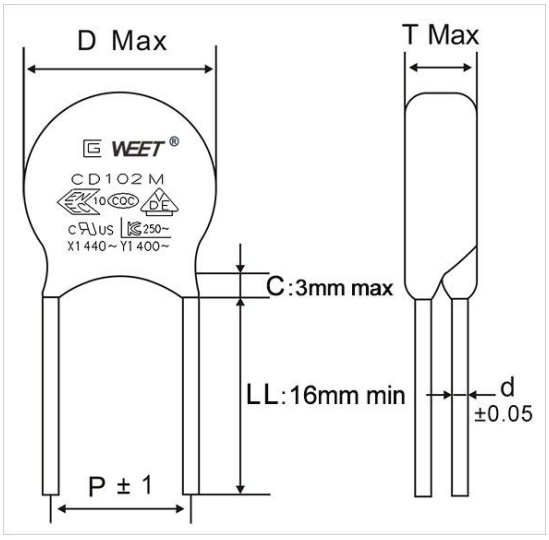
Class X1, 400VAC, Class Y2, 300VAC



FEATURES

- Ideal for across the line applications
- Compact size
- Cost effective product
- Safety standards recognized

DRAWING



SPECIFICATIONS

Operating Temperature	-25°C~ +85°C
Capacitance Range	10pF TO 10000pF
Capacitance Tolerance	±10%, ±20%, +80-20%
Rated Voltage	AC 125V, 250V, 300V, 400V
Sub-class of safety performance	CD:X1Y1；CE:X1Y2
Temperature Coefficient	2B(Y5P)±10%、2E(Y5U)+22%~-56%、2F(Y5V)+22%~-82%
Dissipation Factor (tan δ)	2B: 2.5% max. at 25℃ and 1 KHz, 1±0.2 Vrms.
Insulation Resistance at 20℃	2E/2F: 2.5% max. at 25℃ and 1 KHz, 1±0.2 Vrms.
Dielectric Strength	10000MΩat 500VDC for 1 minute. 1500V AC for 60 seconds. (250V AC) 4000V AC for 60 seconds. (400V AC)

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Class - X1 / Y capacitors are a special type of capacitors (they are safety-certified capacitors) generally designed and used in AC line filtering in many electronic device applications. These safety capacitors are also known by other names, including EMI/RFI suppression capacitors and AC line filter safety capacitors. (EMI stands for electromagnetic interference and RFI stands for radio-frequency interference; RFI is simply higher-frequency EMI.) Class - X1 / Y capacitors help to minimize the generation of EMI/RFI and the negative effects associated with received EMI/RFI.

There are 4 sub classes of X1 / Y capacitors, Y1, Y2, Y3, and Y4. The most common are X1 / Y1 and Y2.

High voltage ceramic capacitors are made of ceramic dielectric. The main features of high voltage ceramic capacitors is excellent withstand voltage. The characteristic of the high voltage ceramic capacitor with high voltage DC resistance, suitable for high pressure by-pass and coupling circuit, low loss high pressure wafer which has a low dielectric loss, especially suitable for use in a television receiver and scan circuit.

As long as the high voltage ceramic capacitor for high frequency, high voltage ceramic capacitor depends on the use of what the occasion, the typical role can eliminate high frequency interference. High voltage ceramic capacitors used in the field of high power and high voltage require the characteristics of small size, high voltage resistance and good frequency characteristics.

X1 / Y1(CD 400VAC) and Y2(CE 300VAC) Safety Standard Recognized Capacitors Applications

Class X2 and Y2 are the most commonly used safety-certified capacitors. Whereas X2 and Y2 caps are appropriate for household applications, X1 and Y1 safety capacitors are used in industrial settings. Y Capacitors: Also known as "line to ground capacitors" (line bypass.) Y capacitors are used in applications where failure of the capacitor could lead to the danger of electrical shock to the user, if the ground connection is lost.

Typical Applications : Line disturbances suppression, Motors and motor controls, Relays, Switching power supplies, Inverters, Line-to-line (Class X) filtering, Line-to-ground (Class Y) filtering, Antenna coupling, Primary and secondary coupling, Network and security protection, audio visual product,, Home Appliance, new energy, Industry automation, LED

Y1 (CD 400VAC) and Y2 (CE 300VAC) Safety Standard Recognized Capacitors Introduction

Class Y Capacitors: These capacitors are rated for use in situations where failure would present an electric shock risk. What this means is, Y class capacitors are designed to simply not fail at all, or be self-healing, allowing them to recover from an arc-over event. Basically, the requirements for a class Y capacitor are stricter and higher than that of an X Capacitor. And Y capacitors are the only capacitors rated to be safely used in 'line-to-ground' situations. However, again, there is not any mention about their failure mode; the Y rating only implies certain minimum requirements are met. This amounts to not failing at all generally, or, as mentioned, being self-healing.

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CE Y2 300VAC

Capacitance	Temp	Tol.	Dimension (mm)			
pF	Char		D max	T max	d ±0.05	P ±1
100pF~330pF	2B ±10% (Y5P)	±10%	6.5	4.5	0.55	7.5
470pF			6.5	4.5	0.55	7.5
680pF			8	4.5	0.6	7.5
1000pF			10.5	4.5	0.6	7.5
1000pF	2E +22~-56% (Y5U)	±20%	7.5	4.5	0.6	7.5
1500pF			8.5	4.5	0.6	7.5
2200pF			9	4.5	0.6	7.5
1000pF	2F +22~-82% (Y5V)	±20%	6.5	4.5	0.55	7.5
1500pF			7.5	4.5	0.6	7.5
2200pF			7.5	4.5	0.6	7.5
3300pF			8.5	4.5	0.6	7.5
4700pF			9.5	4.5	0.6	7.5
0.01uF			13.5	4.5	0.6	10

CD Y1 400VAC

Capacitance	Temp	Tol.	Dimension (mm)			
pF	Char		D max	T max	d ±0.05	P ±1
100pF	2B ±10% (Y5P)	±10%	6.5	5.5	0.55	10
150pF~220pF			6.5	5.5	0.55	10
330pF			7.5	5.5	0.6	10
470pF			8.5	5.5	0.6	10
680pF			9.5	5.5	0.6	10
330pF~470pF	2E +22~-56% (Y5U)	±10%	6.5	5.5	0.55	10
680pF			7.5	5.5	0.6	10
1000pF		±20%	7.5	5.5	0.6	10
1500pF			9.5	5.5	0.6	10
2200pF			10.5	5.5	0.6	10
1000pF	2F +22~-82% (Y5V)	±20%	6.5	5.5	0.55	10
1500pF			7.5	5.5	0.6	10
2200pF			8.5	5.5	0.6	10
3300pF			10.5	5.5	0.6	10
4700pF			12	5.5	0.6	10

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PN Structure

WSY	A2	M	102	C	E	075	000	A
Series	Voltage	Tolerance	Capacitance	Pitch	Material/Temp.Char	Size	Lead Length	Packing
	1	2	3	4	5	6	7	7

1. Voltage

3A	3D	3F	3G	3H	3I	4A	4C	A3	A2	A4
1000V	2000V	3000V	4000V	5000V	6000V	10KV	15KV	250VAC	300VAC	400VAC

2. Tolerance

J	K	M	Z
±5.0%	±10%	±20%	+80-20%

3. Capacitance

100	150	470	101	102	103
10pF	15pF	47pF	100pF	1000pF	0.01uF

4. Pitch Size:

B	C	D
5.0	7.5	10.0

5. Temp. Char.

B	E	F	J	S	T	Y	7
Y5P	Y5U	Y5V	UJ	SL	Y5T	YL	N750

6. Diameter

060	065	070	075	080	085	095	100	105	110	115	120
6.0mm	6.5mm	7.0mm	7.5mm	8.0mm	8.5mm	9.5mm	10.0mm	10.5mm	11.0mm	11.5mm	12.0mm

7. Lead Length

000	035	040	045	050	060
Standard	3.5	4.0	4.5	5.0	6.0

8. Packing

A	B
Ammo	Bulk

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