Safety Standard Certified Ceramic Capacitors-CE Series

(Automotive Grade X1-440VAC/Y2-300VAC) Data Sheet

Feature

- CE type: Y2 (300VAC) fixed capacitor for suppressing power supply electromagnetic interference
- AEC-Q200 qualified
- Meet 85℃/85%/1000 hours test
- Pass 3000 temperature cycles (-55℃～+125℃)
- Comply with IEC 60384-14
- High reliability
- Comply with RoHS 2.0
- Epoxy resin meets the requirements of UL94 V-0 flame retardant grade

Applications

■ Can be used for power supply noise suppression circuit in cross connection and bypass.It is a primary and secondary coupling X/Y capacitor used as AC line filter and switching power supply and AC converter

Applicable Standard

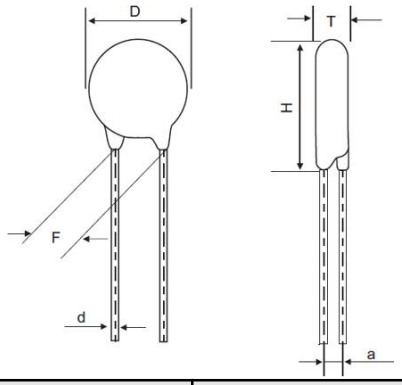
Country	Certification Body	Report Reference	Certificate No.	Capacitance Range	Rated Voltage
USA Canada	UL CUL	UL60384-14	E208107	100～10000pF	X1:440VAC/400VAC Y2:300VAC/275VAC/250VAC
China	CQC	GB/T6346.14-2023 IEC60384-14:2013+AMD1:2016	CQC19001213202	100～10000pF	
Germany	VDE	DIN EN IEC60384-14:2024; EN IEC60384-14:2023	40025748	100～10000pF	
EU	ENEC	DIN EN IEC60384-14:2024; EN IEC60384-14:2023	40025748	100～10000pF	

Part numbering on request.

Specifications

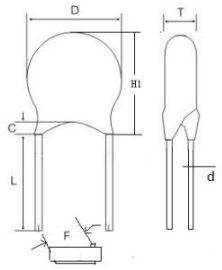
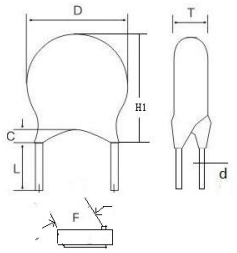
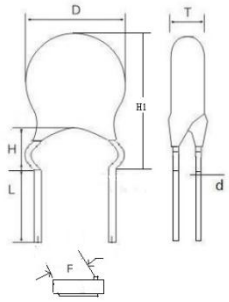
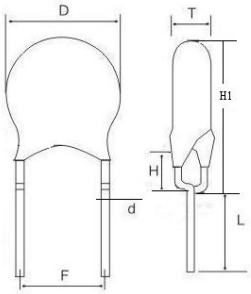
Capacitance and Dissipation factor testing condition	25℃、1KHz、1Vrms
Dissipation Factor(tanδ)	≤2.5%
Rated Voltage	300VAC、275VAC、250VAC
Withstand Voltage	2600VAC
Insulation Resistance (I.R.)	IR≥10000MΩ
Temperature Characteristic	Y5P、Y5U、Y5V
Operating Temperature Range	-55℃to+125℃

Dimensions (mm) and Approval

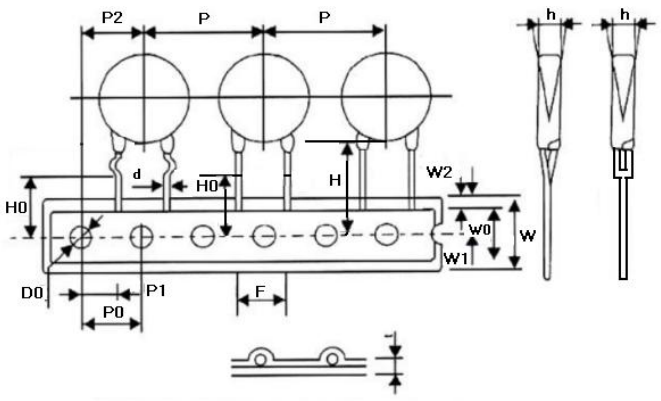


Part No.	Size (mm)					Approval			
	D Max.	T Max.	F±0.5		d±0.05	CQC	VDE	cUL (Canada)	ENEC
Y2-Y5P-101K	7.5	5.0	7.5	10.0	0.6	√	√	√	√
Y2-Y5P-151K	7.5	5.0	7.5	10.0	0.6	√	√	√	√
Y2-Y5P-221K	7.5	5.0	7.5	10.0	0.6	√	√	√	√
Y2-Y5P-331K	7.5	5.0	7.5	10.0	0.6	√	√	√	√
Y2-Y5P-471K	7.5	5.0	7.5	10.0	0.6	√	√	√	√
Y2-Y5P-681K	8.5	5.0	7.5	10.0	0.6	√	√	√	√
Y2-Y5U-102M	7.5	5.0	7.5	10.0	0.6	√	√	√	√
Y2-Y5U-152M	9.5	5.0	7.5	10.0	0.6	√	√	√	√
Y2-Y5U-222M	10.5	5.0	7.5	10.0	0.6	√	√	√	√
Y2-Y5U-332M	12.5	5.0	7.5	10.0	0.6	√	√	√	√
Y2-Y5U-472M	15.0	5.5	7.5	10.0	0.65	√	√	√	√
Y2-Y5U-103M	17.0	5.5	7.5	10.0	0.65	√	√	√	√
Y2-Y5V-103M	14.5	5.5	7.5	10.0	0.65	√	√	√	√

Lead Configuration

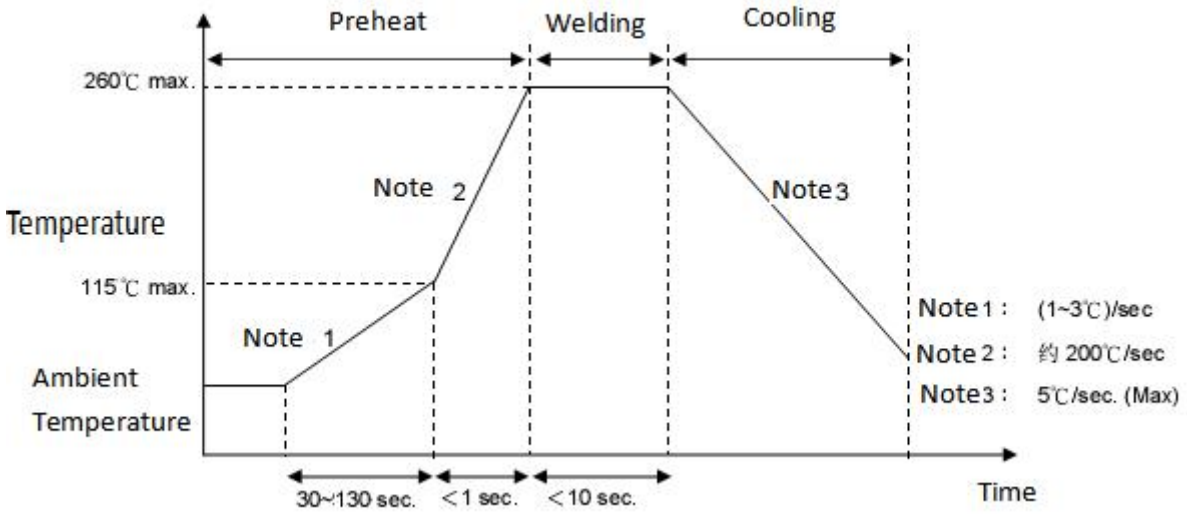
Lead Style	Drawing	Lead Length L (mm)	Coating Lead Length C (mm)	Height H (mm)
Long Straight		16.0 min	①C≤2.5mm (Product diameter < 12mm） ②C≤3.0mm (Product diameter≥12mm)	/
Short Straight		①[2.5≤L＜6.0]+/-0.5; ②[6.0≤L≤10]+/-1.0	①C≤2.5mm (Product diameter < 12mm） ②C≤3.0mm (Product diameter≥12mm)	/
Outside Crimped		①[2.5≤L＜6.0]+/-0.5; ②[6.0≤L≤10]+/-1.0	Not exceed the bend point	5.0mm Max
Vertical Crimped		①[2.5≤L＜6.0]+/-0.5; ②[6.0≤L≤10]+/-1.0	Not exceed the bend point	4.0mm Max

Taping And Dimensions (mm)

Figure	Symbol	P=7.5		P=10.0	
	Po	12.7±0.3		12.7±0.3	
	P	25.4±1.0		25.4±1.0	
	P1	8.95±0.7		7.7±0.7	
	P2	12.7±1.3		12.7±1.3	
	F	7.5±0.8		10.0±0.8	
	Δh	0±2.0		0±2.0	
	W	18.0 +1.5/-1.0		18.0 +1.5/-1.0	
	Wo	10.5 Max		10.5 Max	
	W1	9.0+0.75/-0.5		9.0+0.75/-0.5	
	W2	3.0 Max		3.0 Max	
	Do	4.0±0.2		4.0±0.2	
	H	20+1.5/-1.0		20+1.5/-1.0	
	Ho	16.5&17.0&19.0 +1.5/-1.0		16.5&17.0&19.0 +1.5/-1.0	
	L	Straight Lead	Crimped Lead	Straight Lead	Crimped Lead
		11.0 Max	9.0 Max	11.0 Max	9.0 Max
	t1	0.5±0.2		0.5±0.2	
	t2	1.7 Max		1.7 Max	

Soldering Condition

Wave Soldering Graph



Iron Soldering Condition

Item	Condition
Temperature of soldering copper bit	350℃（max.）
Soldering duration	3sec（max.）
Space between soldering position and coating layer	2mm（min.）

Storage Conditions

- Storage Temperature: ≤35℃.
- Relative Humidity: ≤70% RH.
- Keep away from corrosive atmosphere and sunlight.
- Shelf Life: No more than 12 months. (from the date on the packaging).