Safety Standard Certified Ceramic Capacitors-CY Series (Automotive Grade X1-760VAC Y1-500VAC) Data Sheet

Feature

- CY Type: Interference Suppression Y1 (500VAC) Fixed Ceramic Capacitor
- Meet AEC-Q200 quality standard
- Pass 85° C/85% RH 1000h test
- Pass Temperature Cycle Test（-55℃～+125℃）1000 cycle
- Complying IEC 60384-14
- High reliability
- RoHS 2.0 compliant
- Epoxy resin meeting UL94 V-0 flame-retardant requirements

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

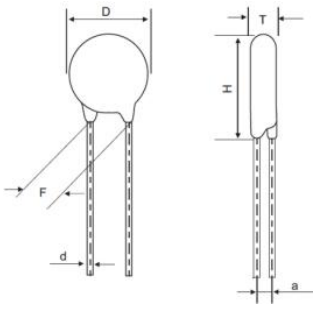
Country	Certification Body	Report Reference	Certificate No.	Capacitance Range	Rated Voltage
USA Canada	UL CUL	UL60384-14	E208107	100～10000pF	X1: 760VAC、500VAC、440VAC、400VAC Y1：500VAC、400VAC、250VAC
China	CQC	IEC60384-14:2013 +AMD1:2016	CQC23001374885	100～10000pF	
Germany	VDE	En 60384-14:2013	40056133	100～10000pF	
EU	ENEC	En 60384-14:2013	40056133	100～10000pF	

Part numbering on request.

Specifications

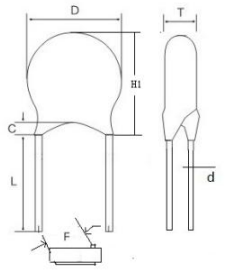
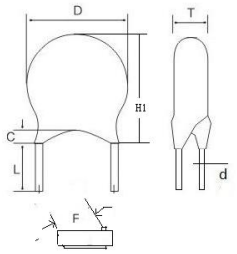
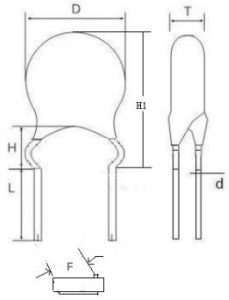
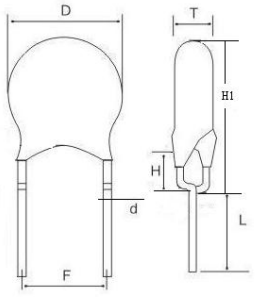
Capacitance and Dissipation factor testing condition	Y5P/Y5U/Y5V:25℃、1KHz、1Vrms
Dissipation Factor(tanδ)	≤2.5%
Rated Voltage	500VAC、400VAC、250VAC
Withstand Voltage	4000VAC
Insulation Resistance (I.R.)	IR≥10000MΩ
Temperature Characteristic	Y5P、Y5U、Y5V
Operating Temperature Range	-55℃to+125℃

Dimensions (mm) and Approval

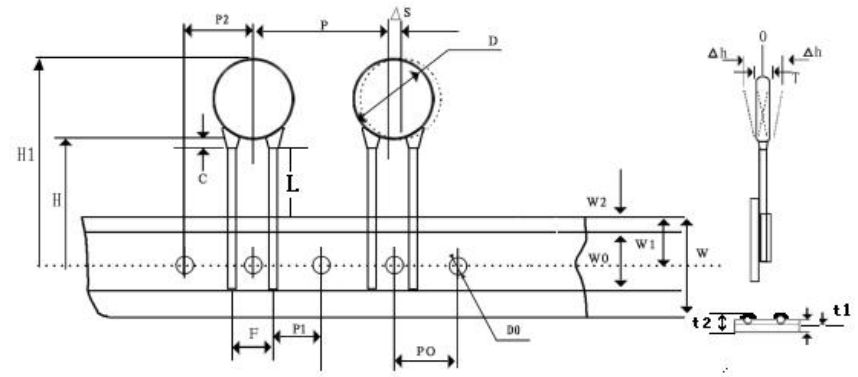
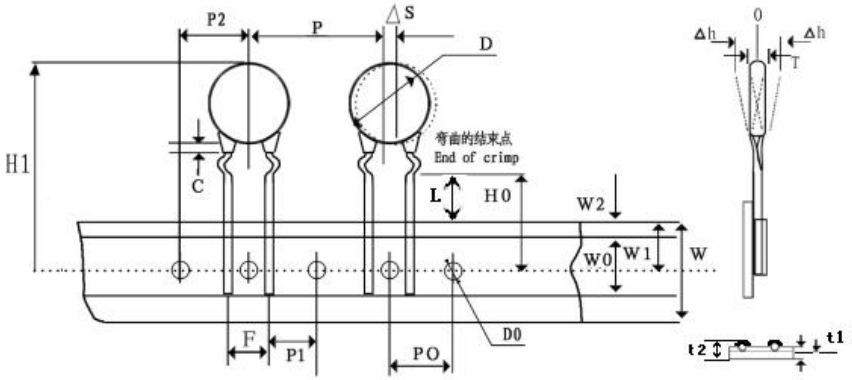
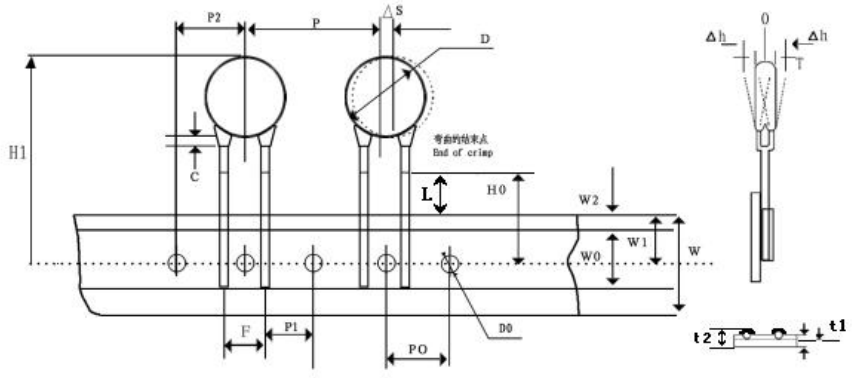


Part No.	Size (mm)				Approval			
	D Max.	T Max.	F±0.5	d±0.05	CQC	VDE	UL/cUL	ENEC
Y1-Y5P-101K	7.5	5.0	10.0	0.6	√	√	√	√
Y1-Y5P-151K	7.5	6.0	10.0	0.6	√	√	√	√
Y1-Y5P-221K	7.5	6.0	10.0	0.6	√	√	√	√
Y1-Y5P-331K	8.5	6.0	10.0	0.6	√	√	√	√
Y1-Y5P-391K	9.5	6.0	10.0	0.65	√	√	√	√
Y1-Y5P-471K	9.5	6.0	10.0	0.65	√	√	√	√
Y1-Y5P-561K	10.5	6.0	10.0	0.65	√	√	√	√
Y1-Y5P-681K	10.5	6.0	10.0	0.65	√	√	√	√
Y1-Y5P-821K	11.5	6.0	10.0	0.65	√	√	√	√
Y1-Y5P-102K	12.5	6.5	10.0	0.65	√	√	√	√
Y1-Y5P-152K	15.5	6.5	10.0	0.65	√	√	√	√
Y1-Y5P-222K	18.0	6.5	10.0	0.65	√	√	√	√
Y1-Y5U-331K	7.5	6.0	10.0	0.6	√	√	√	√
Y1-Y5U-391K	7.5	6.0	10.0	0.6	√	√	√	√
Y1-Y5U-471K	7.5	6.0	10.0	0.6	√	√	√	√
Y1-Y5U-561K	8.5	6.0	10.0	0.6	√	√	√	√
Y1-Y5U-681K	8.5	6.0	10.0	0.6	√	√	√	√
Y1-Y5U-821K	8.5	6.0	10.0	0.6	√	√	√	√
Y1-Y5U-102M	8.5	6.0	10.0	0.6	√	√	√	√
Y1-Y5U-152M	10.5	6.0	10.0	0.65	√	√	√	√
Y1-Y5U-222M	11.5	6.0	10.0	0.65	√	√	√	√
Y1-Y5U-332M	14.0	6.5	10.0	0.65	√	√	√	√
Y1-Y5U-392M	16.0	6.5	10.0	0.65	√	√	√	√
Y1-Y5U-472M	15.0	6.0	10.0	0.65	√	√	√	√
Y1-Y5U-562M	17.0	6.0	10.0	0.65	√	√	√	√
Y1-Y5U-682M	18.0	6.0	10.0	0.65	√	√	√	√
Y1-Y5U-822M	19.0	6.0	10.0	0.65	√	√	√	√
Y1-Y5U-103M	21.0	6.0	10.0	0.65	√	√	√	√
Y1-Y5V-103M	16.0	6.0	10.0	0.65	√	√	√	√

Lead Configuration

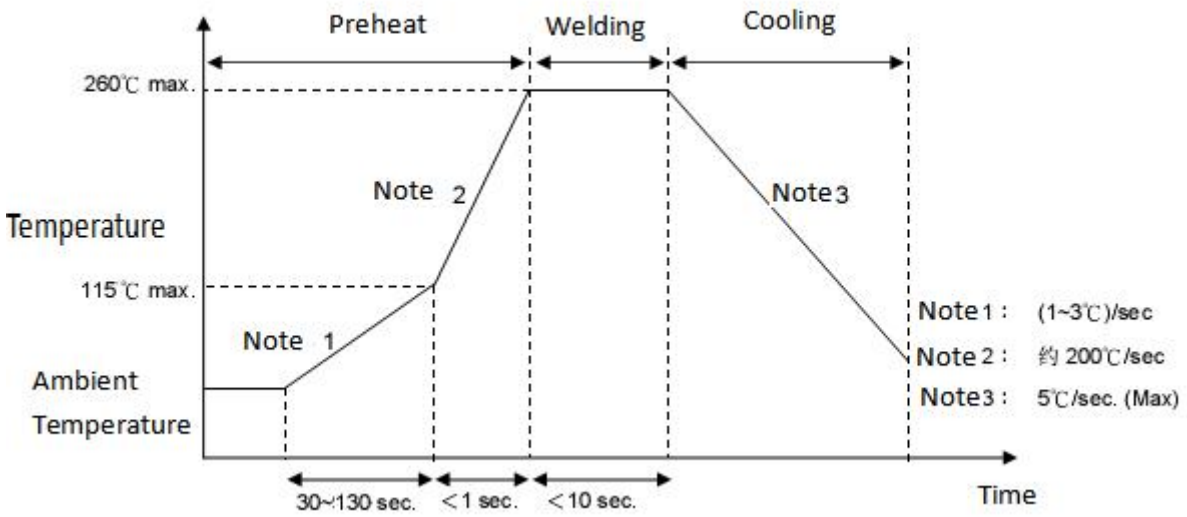
Lead Style	Drawing	Lead Length L (mm)	Coating Lead Length C (mm)	Height H (mm)
Long Straight		16.0 min	①C≤2.5mm (Product diameter < 12mm） ②C≤3.0mm (Product diameter≥12mm)	/
Short Straight		①[2.5≤L＜6.0]+/-0.5; ②[6.0≤L≤10]+/-1.0	①C≤2.5mm (Product diameter < 12mm） ②C≤3.0mm (Product diameter≥12mm)	/
Outside 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=10.0	
 Long Straight	Po	12.7±0.3	
	P	25.4±1.0	
	P1	7.7±0.7	
	P2	12.7±1.3	
	F	10.0±0.5	
	Δh	0±2.0	
 Outside Crimped	W	18.0 +1.5/-1.0	
	Wo	10.5 Max	
	W1	9.0+0.75/-0.5	
	W2	3.0 Max	
	Do	4.0±0.2	
	H （Straight Lead）	20+1.5/-1.0	
	Ho （Crimped Lead）	16.5&17.0&19.0 +1.5/-1.0	
	L	Straight Lead	Crimped Lead
		11.0 Max	9.0 Max
 Vertical Crimped	t1	0.5±0.2	
	t2	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).