Safety Standard Certified Miniature Ceramic Capacitors-CDS Series (Class Y1) Data Sheet

Feature

■Wide capacitance range from 100pF to 4700pF.

■Operating Temperature: -40℃～125℃

■Storage Temperature: 15℃~35℃

■Fix capacitors Y1 for electromagetic interference suppression and connection to the supply mains has high dielectric coefficient ceramic dielectric and flame retardant epoxy resin package.

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

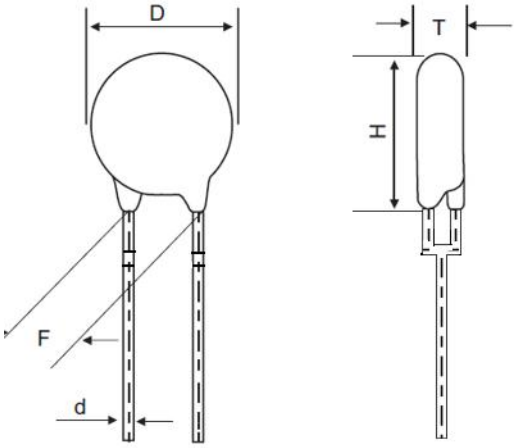
Country	Certification Body	Report Reference	Certificate No.	Capacitance Range	Rated Voltage
USA Canada	UL CUL	UL60384-14	E208107	10～4700pF	X1Y1: 400VAC
Korea	KTL	K60384-14(2015)	SU03031-25001A	10～4700pF	
China	CQC	GB/T6346.14-2023 IEC60384-14:2013+AMD1:2016	CQC19001213616	10～4700pF	
Germany	VDE	DIN EN IEC60384-14:2024; EN IEC60384-14:2023	40025754	10～4700pF	
EU	ENEC	DIN EN IEC60384-14:2024; EN IEC60384-14:2023	40025754	10～4700pF	

Part numbering on request.

Specifications

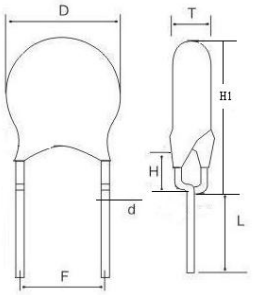
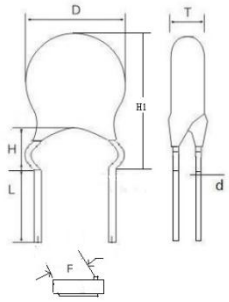
Capacitance and Dissipation factor testing condition	25℃、1KHz、1Vrms
Dissipation Factor(tanδ)	≤2.5%
Rated Voltage	400VAC、250VAC
Withstand Voltage	4000VAC
Insulation Resistance (I.R.)	IR≥6000MΩ
Temperature Characteristic	Y5P、Y5U、Y5V

Dimensions (mm) and Approval

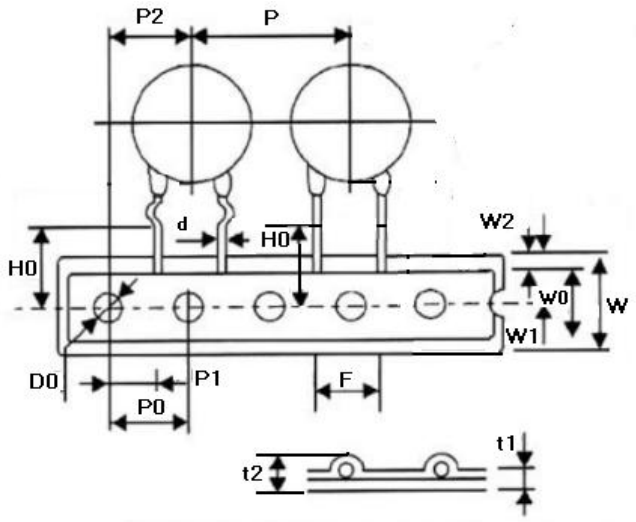


Part No.	Size (mm)				Approval				
	D Max.	T Max.	F±0.8	d±0.05	CQC	VDE	cUL (Canada)	KTL	ENEC
Y1-Y5P-101K	6.0	4.0	10.0	0.6	√	√	√	√	√
Y1-Y5P-151K	6.5	4.5	10.0	0.6	√	√	√	√	√
Y1-Y5P-221K	6.0	4.5	10.0	0.6	√	√	√	√	√
Y1-Y5P-331K	7.0	4.5	10.0	0.6	√	√	√	√	√
Y1-Y5P-471K	7.0	4.5	10.0	0.6	√	√	√	√	√
Y1-Y5P-681K	8.0	4.5	10.0	0.6	√		√	√	
Y1-Y5P-102K	10.0	4.5	10.0	0.6	√	√	√	√	√
Y1-Y5U-471K	6.0	4.5	10.0	0.6	√	√	√	√	√
Y1-Y5U-681K	6.0	4.5	10.0	0.6	√		√	√	
Y1-Y5U-102M	6.5	4.5	10.0	0.6	√	√	√	√	√
Y1-Y5U-152M	7.0	4.5	10.0	0.6	√	√	√	√	√
Y1-Y5U-222M	9.0	4.5	10.0	0.6	√	√	√	√	√
Y1-Y5U-332M	10.5	4.5	10.0	0.6	√	√	√	√	√
Y1-Y5U-472M	12.0	4.5	10.0	0.6	√	√	√	√	√
Y1-Y5V-332M	10.0	5.0	10.0	0.6	√	√	√	√	√
Y1-Y5V-472M	11.0	5.0	10.0	0.65	√	√	√	√	√

Lead Configuration

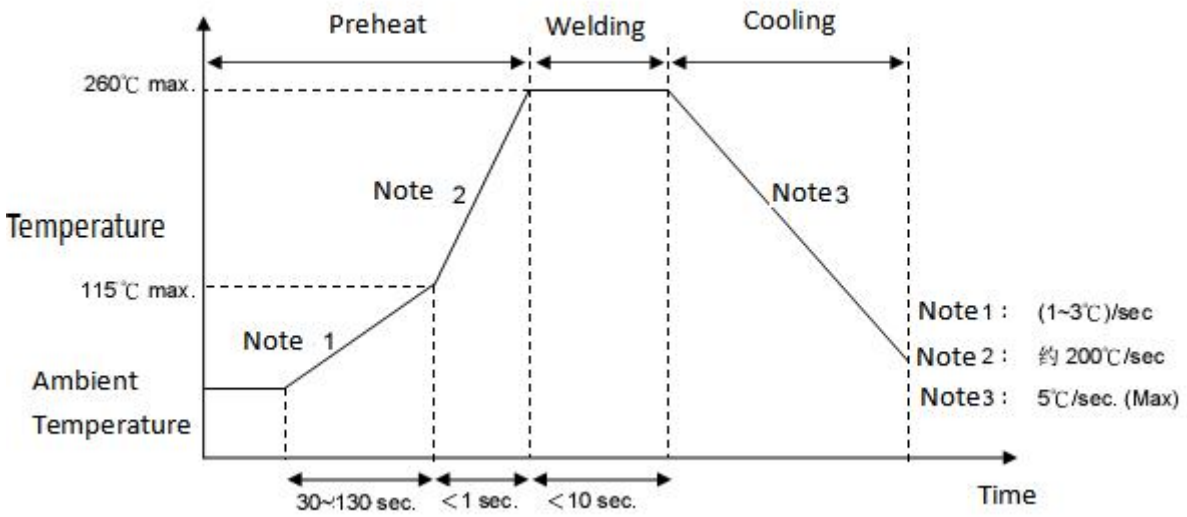
Lead Style	Drawing	Lead Length L (mm)	Coating Lead Length C (mm)	Height H (mm)
Vertical Crimped		①[2.5≤L＜6.0]+/-0.5; ②[6.0≤L≤10]+/-1.0	Not exceed the bend point	4.0mm Max
Outside Crimped		①[2.5≤L＜6.0]+/-0.5; ②[6.0≤L≤10]+/-1.0	Not exceed the bend point	5.0mm Max

Taping And Dimensions (mm)

Figure	Symbol	P=10.0
	Po	12.7±0.3
	P	25.4±1.0
	P1	7.7±0.7
	P2	12.7±1.3
	F	10.0±0.8
	Δh	0±2.0
	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
	Ho	16.5&17.0&19.0 +1.5/-1.0
	L	9.0Max
	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.）