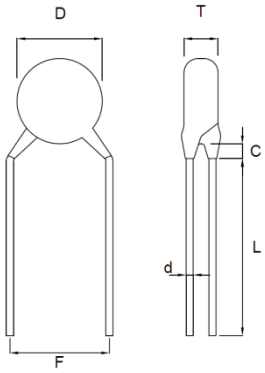
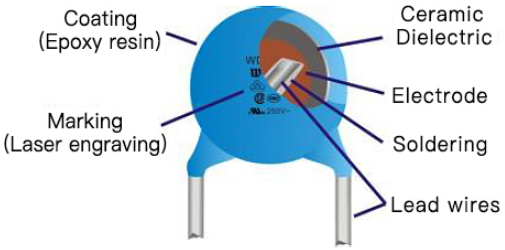
X1 Y2
AC Ceramic Disc Safety Capacitor

Fixed capacitors for the suppression of electromagnetic interference from power sources

CCDC

■ Outline Drawing





Features

- Operating temperature Range Guaranteed up to
- 125°C(UI:85°C)
- Dielectric strength: AC 2600V
- X1/Y2 Class capacitors certified by VDE/ENEC/UL/CQC
- Flame retardant epoxy coating (in accordance with UL94 V-0 specification)
- Automatic insertion is cost-effective
- Products available for RoHS/SVHC/Halogen Free restrictions

- Ideal for use as X/Y cap acitors for AC line filter and primary-secondary coupling on switching Power supplies and AC adapters.
- Ideal for use on D-A isolation and noise absorption For DAA modems without transformers.
- By Pass

• Specifications

Safety class	X1. Y2
Reference Standard	GB/T 6346-14:2015 (IEC 60384-14)
Climatic Category	21/125/21
Passive Flammability Category	C
Rated temperature	-25～+85
Operating temperature	-40℃~125℃
Temperature Charactrtistic	Y5P (ΔC/C: ≤10% @ -25°C ~ +85°C) Y5U (ΔC/C: ≤+22%/-56% @ -25°C ~ +85°C) Y5V (ΔC/C: ≤+22%/-82% @ -25°C ~ +85°C)
Rated Voltage	X1:400V Y2: 125V/250V/300V
Capacitance Range	100PF ~ 10000PF
Capacitance Tolerance	±10% (K), ±20% (M)
Voltage Proof	2500VAC (60s)
Dissipation Factor	≤0.025 (20℃, 1kHz)
Insulation Resistance	≥10 000MΩ, (20℃,100V,1min)
Marking	

■ Dimensions (mm)

Y5P

Part number	(VAC)	T.C.	(PF)	%	D (MAX)	T (MAX)	C (MAX)	F(±1)	Φd(±0.1)
CCDFP101K*075***	125/250/300	Y5P	100	± 10	6.0	3.5	2.0	7.5	0.6
CCDFP151K*075***	125/250/300	Y5P	150	± 10	6.0	3.5	2.0	7.5	0.6
CCDFP221K*075***	125/250/300	Y5P	220	± 10	6.0	3.5	2.0	7.5	0.6
CCDFP331K*075***	125/250/300	Y5P	330	± 10	6.0	3.5	2.0	7.5	0.6
CCDFP471K*075***	125/250/300	Y5P	470	± 10	7.0	3.5	2.0	7.5	0.6
CCDFP561K*075***	125/250/300	Y5P	560	± 10	7.0	3.5	2.0	7.5	0.6
CCDFP681K*075***	125/250/300	Y5P	680	± 10	7.5	3.5	2.0	7.5	0.6
CCDFP821K*075***	125/250/300	Y5P	820	± 10	8.0	3.5	2.0	7.5	0.6
CCDFP102K*075***	125/250/300	Y5P	1000	± 10	9.0	3.5	2.0	7.5	0.6

Y5U

Part number	(VAC)	T.C.	(PF)	%	D (MAX)	T (MAX)	C (MAX)	F(±1)	Φd(±0.1)
CCDFE102K*075***	125/250/300	Y5U	1000	± 20	7.5	4.5	2.0	7.5	0.6
CCDFE152K*075***	125/250/300	Y5U	1500	± 20	7.0	3.5	2.0	7.5	0.6
CCDFE222K*075***	125/250/300	Y5U	2200	± 20	9.5	4.5	2.0	7.5	0.6
CCDFE332K*075***	125/250/300	Y5U	3300	± 20	10.5	3.5	2.0	7.5	0.6
CCDFE392K*075***	125/250/300	Y5U	3900	± 20	11.0	3.5	2.0	7.5	0.6
CCDFE472K*075***	125/250/300	Y5U	4700	± 20	13.0	3.5	2.0	7.5	0.6

Y5V

Part number	(VAC)	T.C.	(PF)	%	D (MAX)	T (MAX)	C (MAX)	F(±1)	Φd(±0.1)
CCDFF102K*075***	125/250/300	Y5V	1000	± 20	6.0	3.5	2.0	7.5	0.6
CCDFF152K*075***	125/250/300	Y5V	1500	± 20	7.5	4.5	2.0	7.5	0.6
CCDFF222K*075***	125/250/300	Y5V	2200	± 20	8.0	4.5	2.0	7.5	0.6
CCDFF332K*075***	125/250/300	Y5V	3300	± 20	9.5	4.5	2.0	7.5	0.6
CCDFF392K*075***	125/250/300	Y5V	3900	± 20	10.5	4.5	2.0	7.5	0.6
CCDFF472K*075***	125/250/300	Y5V	4700	± 20	10.5	4.5	2.0	7.5	0.6
CCDFF562K*075***	125/250/300	Y5V	5600	± 20	10.5	3.5	2.0	7.5	0.6
CCDFF682K*075***	125/250/300	Y5V	6800	± 20	11.0	3.5	2.0	7.5	0.6
CCDFF103K*075***	125/250/300	Y5V	10000	± 20	13.5	3.5	2.0	7.5	0.6

X1、Y2

HOW TO ORDER

CCDF	F	472	M	3E	10	Y	5
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

1. Type Code: CCDG class X1-Y2 ; CCDF class X1-Y1

2. Temperature Characteristic:

Code	Temp. Coefficient	Code	Temp. Coefficient	Code	Temp. Coefficient
C|N	C0G |NPO	P	Y5P	E	Y5U
L	SL	B	X7R	F	Y5V

3. Nominal capacitance:

Expressed by three-digit alphanumeric. The unit is pico-farad (pF). The first and second figures are significant digits, and the third figure expresses the number of zeros which follow the two numbers. If there is a decimal point in between first two figures, it is expressed by the capital letter “R”. See below examples:

Code	Capacitance	Code	Capacitance	Code	Capacitance
5R1	5.1pF	100	10pF	472	4700pF
8R0	8pF	101	100pF	103	0.01uF

4. Capacitance Tolerance Code

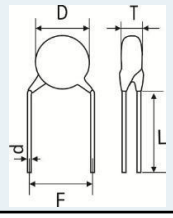
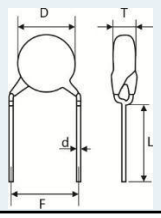
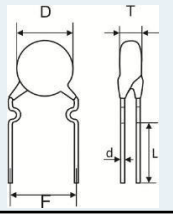
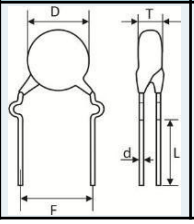
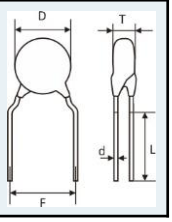
Code	Tolerance	Code	Tolerance	Code	Tolerance
C	± 0.25pF	J	± 5%	M	± 20%
D	± 0.50pF	K	± 10%	Z	+80/-20%

5. Minimum Test Voltage (AC) : X1Y2 = AC2K5 3E , X1Y1 = AC4KV 3G

6. Lead Spacing (F)

Code	Lead spacing (F)	Code	Lead spacing (F)
050	5.0±0.8mm	075	7.5±0.8mm
063	6.35±0.8mm	100	10.0±0.8mm

7. Lead style

Code	S	Y	X	W	Z
Lead Style					

8. Lead length & package style:

Omitted for un-cut bulk pack

5 = 5+/-1mm, bulk pack, 6 = 6+/-1mm ... etc.

TB = Ammo, TR = Reel