

K3Y Ceramic Disc Capacitor

Y2 Class 250Vac; X1 Class 440Vac (EN132400)

SAFETY DEVICE

■ **Description**

- The capacitors consist of a ceramic disc both sides of which are silver plated. Connection leads are made of tinned copper having a diameter of 0.6mm.

The capacitors are supplied with pitch 5mm (flanged leads only) and pitch 7.5mm (straight leads only).

The standard tolerance on capacitance is $\pm 20\%$.

Encapsulation is made of flammable resistant epoxy resin.

■ **Applications**

- Across-the-line
- Line by-pass
- Antenna coupling
- Interference suppression

■ **Pitch 5 Y2, 250Vac; X1, 440Vac, flanged, max thickness T=4.5mm, L>13mm, capacitance and mechanical dimensions**

■ **Features**

- Complying with EN 132400 and IEC 60384-14, 2nd edition, including amendment 1.1995
- High capacitance in small size

■ **Marking**

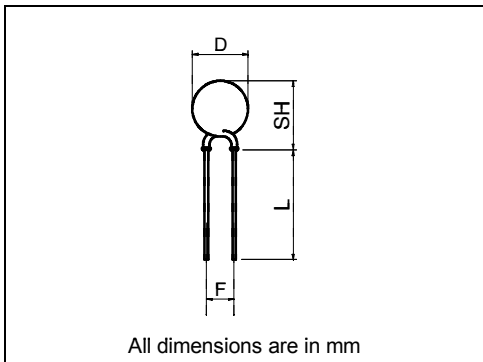
ARCOTRONICS' logo: 

Series: K3

Rated voltage & Subclass : 250 ~ Y2, 440 ~ X1

Capacitance expressed in nF

Approval marks



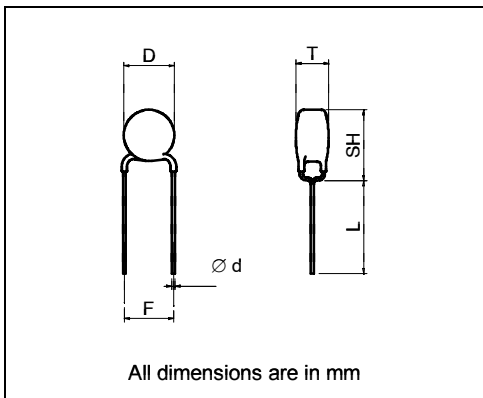
Class Y2 Y5U or better					
C (pF)	Tol %	D (max) (mm)	F (± 0.5) (mm)	SH (mm)	Part Number
100	± 20	8	5	11	K3Y101MQ31CA -- A
150	± 20	8	5	11	K3Y151MQ31CA -- A
220	± 20	8	5	11	K3Y221MQ31CA -- A
330	± 20	8	5	11	K3Y331MQ31CA -- A
470	± 20	8	5	11	K3Y471MQ31CA -- A
680	± 20	9	5	11	K3Y681MQ35CA -- A
1000	± 20	9	5	11	K3Y102MQ35CA -- A
1500	± 20	9	5	11	K3Y152MQ35CA -- A
2200	± 20	9	5	12	K3Y222MQ35CA -- A
3300	± 20	10	5	13	K3Y332MQ39CA -- A
4700	± 20	12	5	15	K3Y472MQ47CA -- A

Mechanical version and packaging (see table 2)

AA = loose, std leads

CK = reel

■ **Pitch 7.5 Y2, 250Vac; X1, 440Vac, straight leads, max thickness T=4.5mm, L=5 \pm 1mm, capacitance and mechanical dimensions**



Class Y2 Y5U or better					
C (pF)	Tol %	D (max) (mm)	F (± 1) (mm)	SH (mm)	Part Number
100	± 20	8	7.5	12	K3Y101MQ31DA -- A
150	± 20	8	7.5	12	K3Y151MQ31DA -- A
220	± 20	8	7.5	12	K3Y221MQ31DA -- A
330	± 20	8	7.5	12	K3Y331MQ31DA -- A
470	± 20	8	7.5	12	K3Y471MQ31DA -- A
680	± 20	8	7.5	12	K3Y681MQ31DA -- A
1000	± 20	8	7.5	12	K3Y102MQ31DA -- A
1500	± 20	8	7.5	12	K3Y152MQ31DA -- A
2200	± 20	9	7.5	13	K3Y222MQ35DA -- A
3300	± 20	10	7.5	14	K3Y332MQ39DA -- A
4700	± 20	12	7.5	16	K3Y472MQ47DA -- A

Mechanical version and packaging (see table 2)

AA = loose, std leads

CK = reel

■ **ELECTRICAL CHARACTERISTICS**

The capacitors meet the essential requirements of IEC 60384-14, 2nd edition. Unless stated otherwise all electrical values apply at an ambient temperature of 20°C $\pm 3^\circ$ C, at normal atmospheric conditions.

Description	Value
Capacitance range at 1kHz, 1V (RMS)	100 to 4700 pF
Capacitance tolerance	$\pm 20\%$
Rated AC voltage:	
Y2	250V; 50/60Hz
X1	440V; 50/60Hz
Dielectric strength (AC)	1500V for 60 s
Test voltage of coating (AC)	2000V for 60 s
Component test voltage of coating (AC)	2500V for 2 s
AC test voltage	1500V
Insulation resistance at 500V (DC)	$\geq 10000M\Omega$
Temperature coefficients on capacitance	100pF to 470pF (Y5P); 680pF and higher (Y5U)
Dissipation factor at 1 kHz, 1V (RMS)	2.5% max
Approvals	FIMKO; VDE (EN132400/60384-14, 2nd ed); cUL: 1414
Operating temperature range	-30 to +125°C
Climatic category	25/125/21