

Ceramic AC Capacitors Class X1, 760 V_{AC}/Class Y1, 500 V_{AC}



Dimensions in mm

Note

Impedance (Z) as a function of frequency (f) at T_a = 20 °C (average).
Measurement with lead length 6 mm.



I = f (U_R) (typ.)



DESIGN

Disc capacitors with epoxy coating

RATED VOLTAGE U_R

- (X1): 760 V_{AC}, 50 Hz (IEC 60384-14.2)
- (Y1): 500 V_{AC}, 50 Hz (IEC 60384-14.2)
- 250 V_{AC}, 60 Hz (UL1414, CSA C22.2)

DIELECTRIC STRENGTH BETWEEN LEADS

- Component test:
- 4000 V_{AC}, 50 Hz, 2 s
- As repeated test admissible only once with:
- 3600 V_{AC}, 50 Hz, 2 s
- Random sampling test (destructive test):
- 4000 V_{AC}, 50 Hz, 60 s

DIELECTRIC STRENGTH OF BODY INSULATION

4000 V_{AC}, 50 Hz, 60 s (destructive test)

DISSIPATION FACTOR tan δ

≤ 25 × 10⁻³

INSULATION RESISTANCE R_{IS}

≥ 10 × 10⁹ Ω

CATEGORY TEMPERATURE RANGE θ_A

(- 40 to + 125) °C

CLIMATIC CATEGORY ACC. TO EN60068-1

40/125/21

COATING

Epoxy dipped, insulating, flame retarding acc. to UL 94V-0

TAPING AND SPECIAL LEAD CONFIGURATIONS

On request

MARKING



WKP 33 pF to 1.5 nF

WKP 2.2 nF to 4.7 nF

Note

- All approval marks are also shown on the label.

ORDERING INFORMATION, CERAMIC X1/Y1 CAPACITORS WKP						
CAPACITANCE ⁽²⁾ (pF)	TOL. (%)	D x s (mm)	F ± 1 ⁽¹⁾ (mm)	d ± 0.05 ⁽¹⁾ (mm)	V ± 0.5 ⁽¹⁾ (mm)	ORDERING CODE
CLASS 1 N 750						
33	± 10 , ± 20	8.0 x 6.0	12.5	0.6	1.9	WKP330□CP□□□KR
CLASS 2 K 1200						
47	± 10 , ± 20	8.0 x 6.0	12.5	0.6	2.3	WKP470□CP□□□KR
68						WKP680□CP□□□KR
CLASS 2 K 1500						
100	± 10 , ± 20	8.0 x 6.0	12.5	0.6	2.3	WKP101□CP□□□KR
CLASS 2 K 2000						
150	± 10 , ± 20	8.0 x 6.0	12.5	0.6	2.3	WKP151□CP□□□KR
220						WKP221□CP□□□KR
CLASS 2 K 4000						
330	± 10 , ± 20	8.0 x 6.0	12.5	0.6	2.5	WKP331□CP□□□KR
470		9.0 x 6.0				WKP471□CP□□□KR
680		10.0 x 6.0				WKP681□CP□□□KR
1000		12.0 x 6.0				WKP102□CP□□□KR
1500		13.0 x 6.0		0.8	2.7	WKP152□CP□□□KR
2200		15.0 x 6.0				WKP222□CP□□□KR
3300		16.0 x 6.0				WKP332□CP□□□KR
3900		18.0 x 6.0				WKP392□CP□□□KR
4700						WKP472□CP□□□KR

Notes

⁽¹⁾ Standard lead configuration, other lead spacing and diameter available on request.

⁽²⁾ Capacitance values from 470 pF to 4700 pF: The alternative usage of smaller VKP series is recommended for new application.

ORDERING CODE			
□	7 th digit	Capacitance Tolerance:	± 10 % = K ± 20 % = M
□□□	10 th to 12 th digit	Lead Configuration (see General Information)	
R	14 th digit	RoHS Compliant Component	

APPROVALS						
IEC 60384 - 14 / 2nd Issue (1993) incl. Am. 1 (1995) - Safety Tests						
EN 132 400 (1994) - Safety Tests						
THAT APPROVAL TOGETHER WITH THE CB TEST CERTIFICATE SUBSTITUTES THE NATIONAL APPROVAL OF THE FOLLOWING						
Belgium	France	Italy	Austria	China	Japan	Spain
Denmark	Greece	Luxembourg	Portugal	Singapore	Poland	United
Germany	Ireland	Netherlands	Sweden	Slovenia	Hungaria	Czech Republic
Finland	Iceland	Norway	Switzerland	Korea	Israel	
Y1 - Capacitor: CB-Test Certificate: DE-1-11002-A1				33 pF ... 4.7 nF	500 V _{AC}	
X1 - Capacitor: CB-Test Certificate: DE-1-11002-A1				33 pF ... 4.7 nF	760 V _{AC}	
Minimum thickness of insulation: 0.4 mm						
UNDERWRITERS LABORATORIES INC.						
UL 1414	Across-the-line, Antenna-coupling and Line-by-pass component.			33 pF ... 4.7 nF	250 V _{AC}	
CANADIAN STANDARDS ASSOCIATION						
CSA C22.2	Across-the-line, antenna-coupling and line-by-pass component			33 pF ... 4.7 nF	250 V _{AC}	
NO 1-98	Agency Files / Licences			E 183 844 V1 S1		

ORDERING INFORMATION						
<u>WKP</u>	<u>221</u>	<u>M</u>	<u>CP</u>	<u>ED0</u>	<u>K</u>	<u>R</u>
SERIES	CAP. VALUE	TOLERANCE	RATED VOLTAGE	LEAD CONFIGURATION	INTERNAL CODE	ROHS COMPLIANT



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