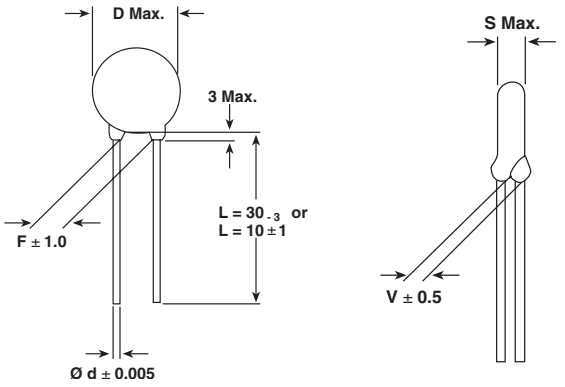
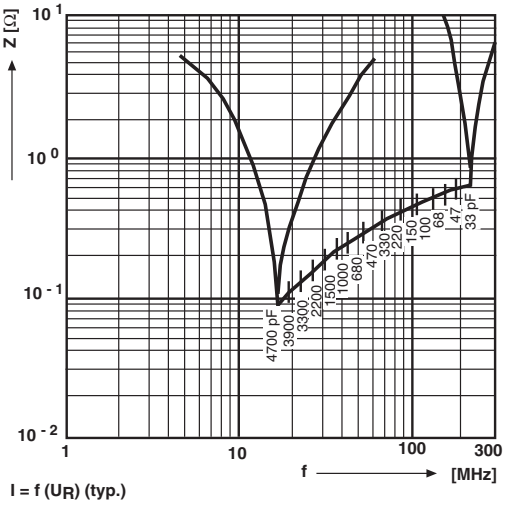
Ceramic AC Capacitors
Class X1, 760 V_{AC}/Class Y1, 500 V_{AC}

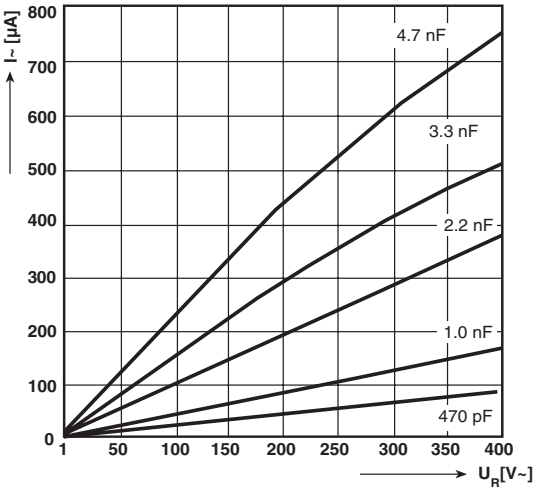


• Dimensions in mm

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

RoHS COMPLIANT

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:

$\leq 25 \bullet 10^{-3}$

INSULATION RESISTANCE Ris:

$\geq 10 \bullet 10^9\ \Omega$

CATEGORY TEMPERATURE RANGE ϑ_A:

(- 40 to + 125) °C

CLIMATIC CATEGORY ACC. TO EN60068-1:

40/125/21

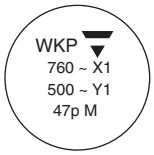
COATING:

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

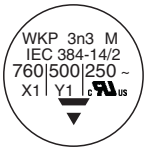
TAPING AND SPECIAL LEAD CONFIGURATIONS:

On request

MARKING:



WKP 33 pF to 680 pF



WKP 1.0 nF to 4.7 nF

All approval marks are also shown on the label.

ORDERING INFORMATION, CERAMIC X1 / Y1 CAPACITORS WKP

CAPACITANCE** (pF)	TOL. (%)	D x s (mm)	F ± 1* (mm)	d ± 0.05* (mm)	V ± 0.5* (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						WKP471□CP□□□KR
680		9.0 x 6.0				WKP681□CP□□□KR
1000		10.0 x 6.0		0.8	2.7	WKP102□CP□□□KR
1500		12.0 x 6.0				WKP152□CP□□□KR
2200		13.0 x 6.0				WKP222□CP□□□KR
3300		15.0 x 6.0				WKP332□CP□□□KR
3900		16.0 x 6.0				WKP392□CP□□□KR
4700		18.0 x 6.0				WKP472□CP□□□KR

* Standard lead configuration, other lead spacing and diameter available on request.

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

ORDERING CODE

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

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}
	Agency Files / Licences	E 183 844 V1 S1		

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

WKP	221	M	CP	ED0	K	R
SERIES	CAP. VALUE	TOLERANCE	RATED VOLTAGE	LEAD CONFIGURATION	INTERNAL CODE	RoHS COMPLIANT

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