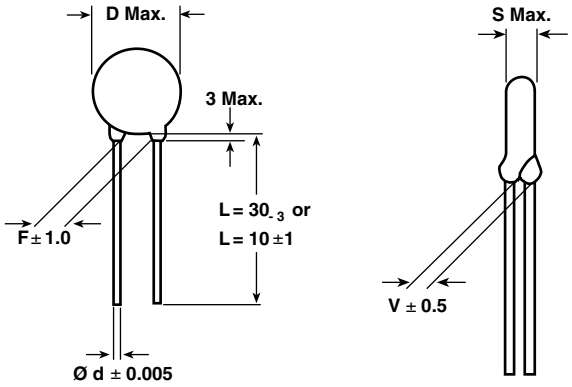
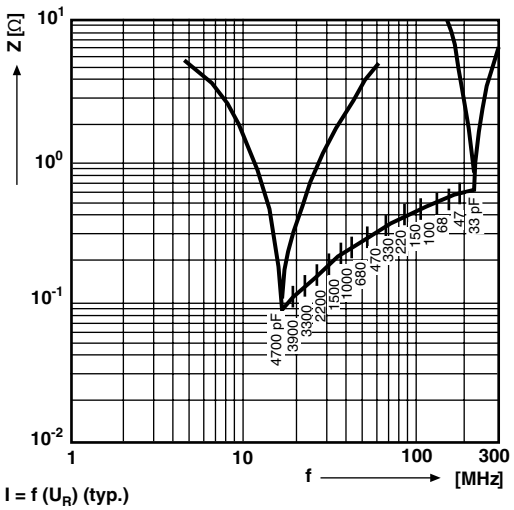
Ceramic AC Capacitors
Class X1, 760 V_{AC}/Class Y1, 500 V_{AC}



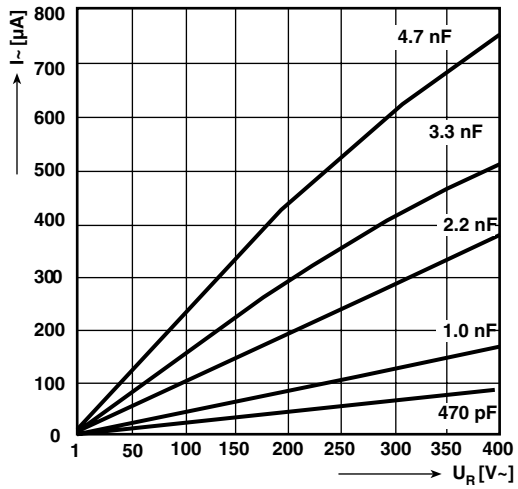
Dimensions in mm

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 x 10^{-3}

INSULATION RESISTANCE R_{IS}

≥ 10 x 10^9 Ω

CATEGORY TEMPERATURE RANGE ϑ_A

(- 40 to + 125) °C

CLIMATIC CATEGORY ACC. TO EN60068-1

40/125/21

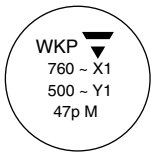
COATING

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

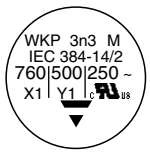
TAPING AND SPECIAL LEAD CONFIGURATIONS

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						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

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

□	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

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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Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

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LifeElectronics
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ООО «ЛайфЭлектроникс» **“LifeElectronics” LLC**

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

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- *Специальные условия для постоянных клиентов.*
- *Подбор аналогов.*
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- *Комплексную поставку.*
- *Работу по проектам и поставку образцов.*
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- *Тестирование поставляемой продукции.*
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- *Техническую поддержку проекта.*
- *Защиту от снятия компонента с производства.*
- *Оценку стоимости проекта по компонентам.*
- *Изготовление тестовой платы монтаж и пусконаладочные работы.*

Тел: +7 (812) 336 43 04 (многоканальный)
Email: org@lifeelectronics.ru

www.lifeelectronics.ru