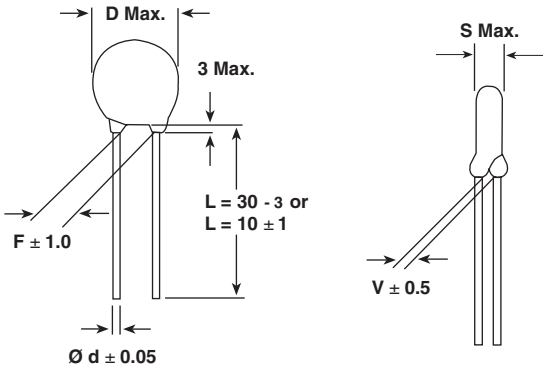
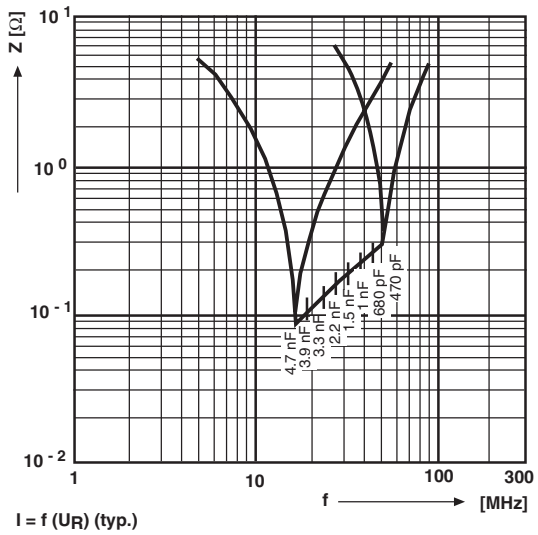
# Ceramic AC Capacitors
# Class X1, 760 $V_{AC}$/Class Y1, 500 $V_{AC}$

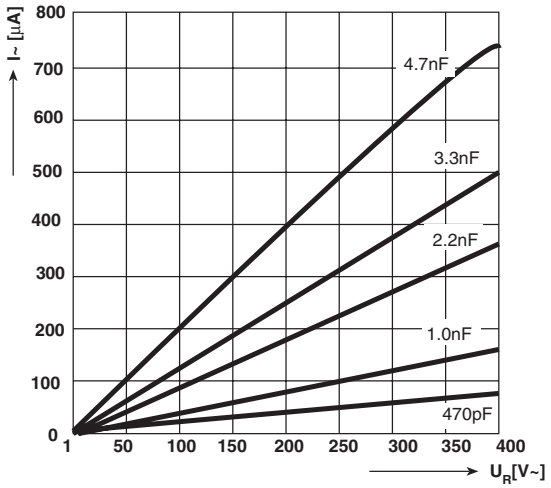



• Dimensions in mm

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 ϑA:**

(- 40 to + 125) °C

**CLIMATIC CATEGORY ACC. TO EN60068-1:**

40/125/21

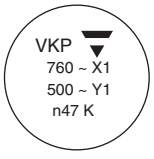
**COATING:**

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

**TAPING AND SPECIAL LEAD CONFIGURATIONS:**

On request

**MARKING:**




VKP 470 pF to 1.5 nF


VKP 2.2 nF to 4.7 nF

All approval marks are also shown on the label.

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

| ORDERING INFORMATION, CERAMIC X1 / Y1 CAPACITORS VKP | | | | | | |
|---|---|---|---|---|---|---|
| **CAPACITANCE** (pF)** | **TOL. (%)** | **D x s (mm)** | **F ± 1* (mm)** | **d ± 0.05* (mm)** | **V ± 0.5* (mm)** | **ORDERING CODE** |
| **CLASS 2 K4000** | | | | | | |
| 470 | ± 10 % ± 20 % | 8.0 x 5.0 | 12.5 | 0.6 | 2.1 | VKP471□CQ□□□KR |
| 680 | | 8.0 x 5.0 | | | | VKP681□CQ□□□KR |
| 1000 | | 9.0 x 5.0 | | 0.8 | | VKP102□CQ□□□KR |
| 1500 | | 10.0 x 5.0 | | | | VKP152□CQ□□□KR |
| 2200 | | 12.0 x 5.0 | | | | VKP222□CQ□□□KR |
| 2700 | | 13.0 x 5.0 | | | | VKP272□CQ□□□KR |
| 3300 | | 15.0 x 5.0 | | | | VKP332□CQ□□□KR |
| 3900 | | 15.0 x 5.0 | | | | VKP392□CQ□□□KR |
| 4700 | | 17.0 x 5.0 | | | | VKP472□CQ□□□KR |

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

** When capacitance values less than 470 pF are required, the usage of WKP series is recommended.

| ORDERING CODE | | | |
|---|---|---|---|
| □ | 7th digit | Capacitance Tolerance | ± 10 % = K<br>± 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 Kingdom |
| Germany | Ireland | Netherlands | Sweden | Slovenia | Hungaria | Czech Republic |
| Finland | Iceland | Norway | Switzerland | Korea | Israel | |

| | | | | |
|---|---|---|---|---|
| | Y1 - Capacitor: CB-Test Certificate: | DE-1-11001-A1 | 470 pF ... 4.7 nF | 500 Vac |
| | X1 - Capacitor: CB-Test Certificate: | DE-1-11001-A1 | 470 pF ... 4.7 nF | 760 Vac |
| | Minimum thickness of insulation: 0.4 mm | | | |

Underwriters Laboratories Inc.

| | | | | |
|---|---|---|---|---|
| UL 1414 | Across-the-line, Antenna-coupling and Line-by-pass component. | | 470 pF ... 4.7 nF | 250 Vac |
| | Agency Files / Licences | E 183 844 V1 S5 | | |

Canadian Standards Association

| | | | | |
|---|---|---|---|---|
| CSA C22.2 | Across-the-line, Antenna-coupling and Line-by-pass component. | | 470 pF ... 4.7 nF | 250 Vac |
| No 1-94 | Agency Files / Licences | E 183 844 V1 S5 | | |

## ORDERING INFORMATION

| VKP | 102 | M | CQ | ED0 | K | R |
|---|---|---|---|---|---|---|
| SERIES | CAP. VALUE | TOLERANCE | RATED VOLTAGE | LEAD CONFIGURATION | INTERNAL CODE | RoHS COMPLIANT |

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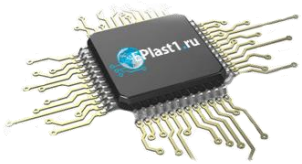
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.




**Как с нами связаться**

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