

Ceramic AC Capacitors

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

DESIGN:

Disc capacitors with epoxy coating

RATED VOLTAGE U_R:

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

DIELECTRIC STRENGTH BETWEEN LEADS:

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

DIELECTRIC STRENGTH OF BODY INSULATION:

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

DISSIPATION FACTOR tan δ:

≤ 25 · 10⁻³

INSULATION RESISTANCE R_{is}:

≥ 10 · 10⁹Ω

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

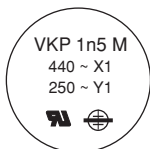
TAPING AND SPECIAL LEAD CONFIGURATIONS:

On request

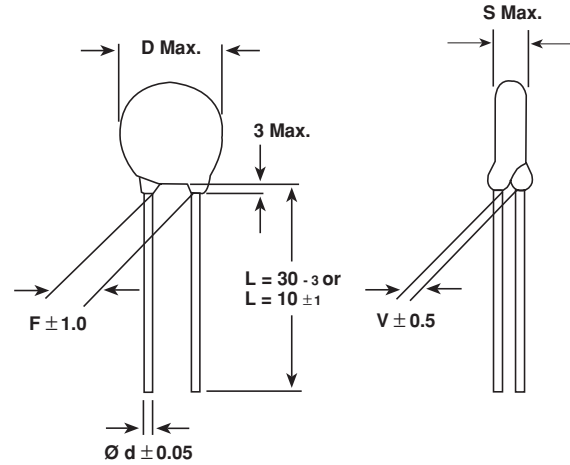
MARKING:

D ≤ 9mm

D ≥ 10mm

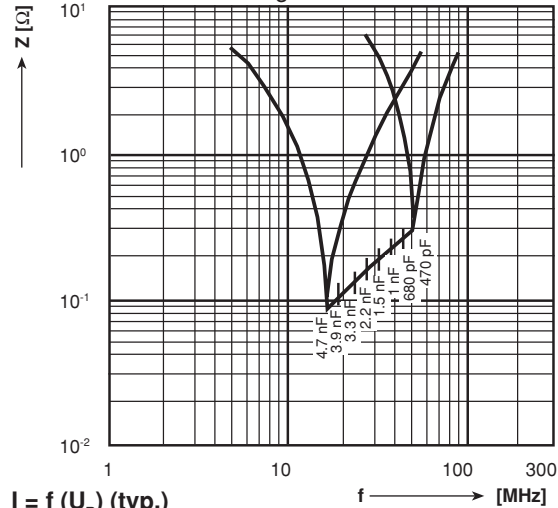


All approval marks are also shown on the label.

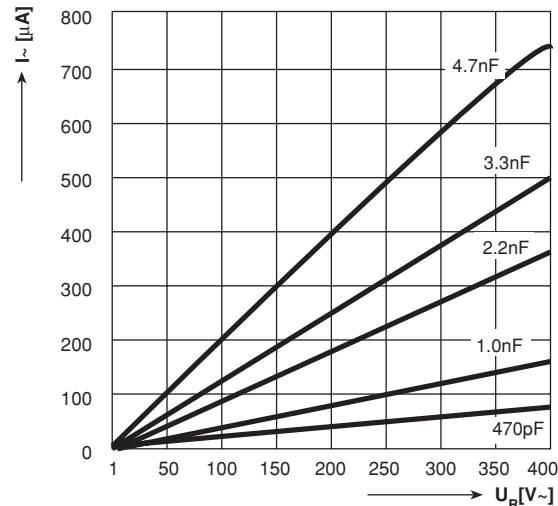


• Dimensions in mm

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



I = f (U_R) (typ.)





| CAPACITANCE (pF) | D x s Max. (mm) | F ± 1* (mm) | d ± 0.05* (mm) | V ± 0.5* (mm) | ORDERING CODE | CERAMIC DIELECTRIC |
|------------------|-----------------|-------------|----------------|---------------|---------------|--------------------|
| 470 | 8.0 x 5.0 | 12.5 | 0.6 | 2.1 | VKP471□CQ□□□K | K 4000 |
| 680 | 8.0 x 5.0 | | VKP681□CQ□□□K | | | |
| 1000 | 9.0 x 5.0 | | VKP102□CQ□□□K | | | |
| 1500 | 10.0 x 5.0 | | VKP152□CQ□□□K | | | |
| 2200 | 12.0 x 5.0 | | VKP222□CQ□□□K | | | |
| 2700 | 13.0 x 5.0 | | VKP272□CQ□□□K | | | |
| 3300 | 15.0 x 5.0 | | VKP332□CQ□□□K | | | |
| 3900 | 15.0 x 5.0 | | VKP392□CQ□□□K | | | |
| 4700 | 17.0 x 5.0 | | VKP472□CQ□□□K | | | |

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

Capacitance Tolerances: ± 10%, ± 20%

| | | | |
|-----------------------|--|--|------------------------|
| Ordering Code: | <input type="checkbox"/> 7th digit: | Capacitance tolerance: | ± 10% = K ± 20% = M |
| | <input type="checkbox"/> 10th/11th/12th digit: | Lead configuration (See General Information) | |

| APPROVALS | | | |
|--|---|---|--|
| IEC 60384-14 2ND edition (1993) Table II & A 1 (1995-06) | (Y1) CB-Test Certificate (X1) CB-Test Certificate | Fi 492 A 2 (250V _{AC}) Fi 491 A 2 (440V _{AC}) | |
| EN 132400 (1994) These approvals together with the CB-Test Certificate substitutes the national approval of the nations given in the table below | (Y1) CB-Test Certificate (X1) CB-Test Certificate | DE 1-7461 (500V _{AC}) DE 1-7461 (760V _{AC}) | |
| UL 1414 | Across-the-line, antenna coupling and line-by-pass capacitor | E 183844 V1 S5 (250V _{AC}) | |
| CSA C22.2 No. 1-94 | Across-the-line, line-to-ground and antenna isolation capacitor | LR 64546-12 (250V _{AC}) E 183844 V1 S5 (250V _{AC}) | |

This approval mark together with the CB-Certificate replace all national approval marks of the following countries (they have already signed the CB-Agreement):

| | | | | |
|-------------|---------------|----------|---------|-----------------|
| Austria | Belgium | Denmark | Finland | Sweden |
| France | Germany | Ireland | Italy | Switzerland |
| Netherlands | Israel | Portugal | Spain | Great Britain |
| Japan | Norway | China | Poland | Czech. Republic |
| Singapore | Rep. of Korea | Hungary | Iceland | Slovenia |

| ORDERING INFORMATION | | | | | |
|----------------------|--------------------------|-----------------------|----------------------------|----------------------------------|---------------------------|
| VKP SERIES | 102 CAP. VALUE | M TOLERANCE | CQ RATED VOLTAGE | EDO LEAD CONFIGURATION | K INTERNAL CODE |