



Film Capacitors

Metallized Polypropylene Film Capacitors (MKP)

Series/Type: B32669
Date: August 2004

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Not suitable for connection in parallel to line!

Typical applications

- Energy storage
- Filtering

Climatic

- Max. operating temperature: 85 °C
- Climatic category (IEC 60068-1): 40/085/21

Construction

- Dielectric: polypropylene (PP)
- Cylindrical winding
- Insulating sleeve
- Face ends sealed with epoxy resin

Features

- Good self-healing properties

Terminals

- Axial leads, lead-free tinned
- Axial leads, insulated, tinned copper wires gathered together by a tin cover (fray), AWG 22

Marking

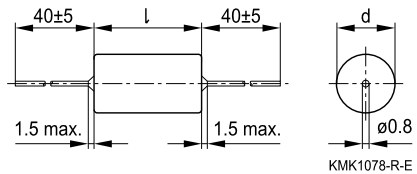
Manufacturer
 Series number
 rated capacitance (coded),
 capacitance tolerance (code letter),
 rated AC voltage, frequency, date code

Delivery mode

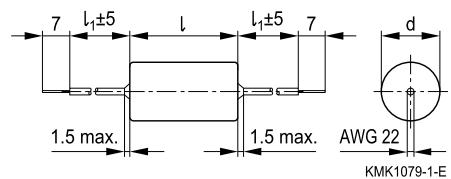
Bulk (untaped)

Dimensional drawing

Tinned leads



Insulated leads



Dimensions in mm

When bending leads, take care to leave a clearance of 1 mm to the capacitor body.



Overview of available types

| Version | Tinned leads | | Insulated leads | |
|-------------------|--------------|-----|-----------------|-----|
| Page | 4 | | 5 | |
| V_{rms} (VAC) | 250 | 400 | 250 | 400 |
| C_R (μF) | | | | |
| 1.0 | | | | |
| 1.5 | | | | |
| 2.0 | | | | |
| 2.5 | | | | |
| 3.0 | | | | |
| 4.0 | | | | |
| 5.0 | | | | |
| 6.0 | | | | |
| 8.0 | | | | |
| 10 | | | | |



B32669

AC applications (wound)

Ordering codes and packing units (tinned leads)

| V_{rms} | C_R | Max. dimensions $d \times l$ mm | Ordering code (composition see below) | Untaped pcs./unit |
|-----------|-------|---------------------------------------|---|----------------------|
| 250 | 1.0 | 9.0 × 32.0 | B32669C3105+000 | 250 |
| | 1.5 | 11.0 × 32.0 | B32669C3155+000 | 250 |
| | 2.0 | 12.5 × 32.0 | B32669C3205+000 | 200 |
| | 2.5 | 14.0 × 32.0 | B32669C3255+000 | 200 |
| | 3.0 | 15.5 × 32.0 | B32669C3305+000 | 150 |
| | 4.0 | 15.0 × 47.0 | B32669C3405+000 | 150 |
| | 6.0 | 17.0 × 47.0 | B32669C3605+000 | 100 |
| | 8.0 | 19.5 × 47.0 | B32669C3805+000 | 50 |
| | 10 | 21.5 × 47.0 | B32669C3106+000 | 50 |
| 400 | 1.0 | 13.0 × 32.0 | B32669B6105+000 | 250 |
| | 1.5 | 15.0 × 32.0 | B32669B6155+000 | 200 |
| | 2.0 | 19.0 × 32.0 | B32669B6205+000 | 200 |
| | 2.5 | 21.0 × 32.0 | B32669B6255+000 | 150 |
| | 3.0 | 18.0 × 47.0 | B32669B6305+000 | 150 |
| | 4.0 | 21.0 × 47.0 | B32669B6405+000 | 100 |
| | 5.0 | 22.0 × 47.0 | B32669B6505+000 | 150 |
| | 6.0 | 25.5 × 47.0 | B32669B6605+000 | 50 |

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

K = ±10%

J = ±5%

Ordering codes and packing units (insulated leads)

| V_{rms} | C_R | Max. dimensions $d \times l$ mm | Ordering code (composition see below) | Untaped pcs./unit |
|-----------|-------|---------------------------------------|---|----------------------|
| 250 | 1.0 | 9.0 × 32.0 | B32669S3105+*** | 250 |
| | 1.5 | 11.0 × 32.0 | B32669S3155+*** | 250 |
| | 2.0 | 12.5 × 32.0 | B32669S3205+*** | 250 |
| | 2.5 | 14.0 × 32.0 | B32669S3255+*** | 250 |
| | 3.0 | 15.5 × 32.0 | B32669S3305+*** | 200 |
| | 4.0 | 15.0 × 47.0 | B32669S3405+*** | 200 |
| | 6.0 | 17.0 × 47.0 | B32669S3605+*** | 150 |
| | 8.0 | 19.5 × 47.0 | B32669S3805+*** | 150 |
| | 10 | 21.5 × 47.0 | B32669S3106+*** | 150 |
| 400 | 1.0 | 13.0 × 32.0 | B32669S6105+*** | 250 |
| | 1.5 | 15.0 × 32.0 | B32669S6155+*** | 250 |
| | 2.0 | 19.0 × 32.0 | B32669S6205+*** | 250 |
| | 2.5 | 21.0 × 32.0 | B32669S6255+*** | 150 |
| | 3.0 | 18.0 × 47.0 | B32669S6305+*** | 150 |
| | 4.0 | 21.0 × 47.0 | B32669S6405+*** | 150 |
| | 5.0 | 22.0 × 47.0 | B32669S6505+*** | 150 |
| | 6.0 | 25.5 × 47.0 | B32669S6605+*** | 150 |

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

K = ±10%

J = ±5%

*** = Code number for lead version and length:

504 = Insulated leads (lead length 160 mm)

508 = Insulated leads (lead length 65 mm)

Technical data

| | | |
|--|--|---|
| Operating temperature range | Max. operating temperature $T_{op,max}$ | +85 °C |
| | Upper category temperature T_{max} | +85 °C |
| | Lower category temperature T_{min} | -40 °C |
| | Rated temperature T_R | +85 °C |
| Dissipation factor $\tan \delta$ at 20 °C (upper limit values) | $2 \cdot 10^{-3}$ at 1 kHz | |
| Time constant $\tau = C_R \cdot R_{ins}$ at 20 °C, rel. humidity $\leq 65\%$ (minimum as-delivered values) | 2500 s | |
| DC test voltage | $V_R = 250 \text{ VAC}$: 430 VDC, 1 s | |
| | $V_R = 400 \text{ VAC}$: 700 VDC, 1 s | |
| AC test voltage | $V_R = 250 \text{ VAC}$: 440 VAC, 1 s | |
| | $V_R = 400 \text{ VAC}$: 700 VAC, 1 s | |
| Damp heat test Limit values after damp heat test | 21 days/40 °C/93% relative humidity | |
| | Capacitance change $ \Delta C/C $ | $\leq 3\%$ |
| | Dissipation factor change $\Delta \tan \delta$ | $\leq 0.5 \cdot 10^{-3}$ (at 1 kHz) $\leq 1.0 \cdot 10^{-3}$ (at 10 kHz) |
| | Time constant $\tau = C_R \cdot R_{ins}$ | $\geq 50\%$ of minimum as-delivered values |
| Pulse handling capability (rate of voltage rise V_{pp}/τ) | $\leq 10 \text{ V}/\mu\text{s}$ | |

Permissible AC voltage V_{rms} versus frequency f

Values can be obtained on request. In specific cases please provide a scaled voltage/ time graph and state operating conditions.