



Film Capacitors

Metallized Polypropylene Film Capacitors (MKP)

Series/Type: B32669
Date: August 2004

© EPCOS AG 2004. Reproduction, publication and dissemination of this data sheet, enclosures hereto and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

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

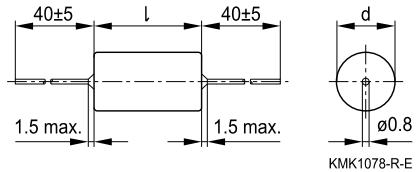
Manufacturer
 Series number
 rated capacitance (coded),
 capacitance tolerance (code letter),
 rated AC voltage, frequency, date code

Delivery mode

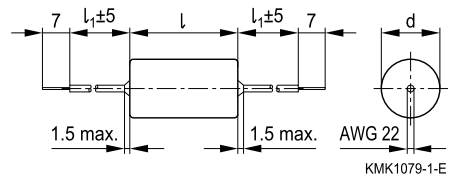
Bulk (untaped)

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
VAC	μF			
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 = $\pm 10\%$

J = $\pm 5\%$

*** = 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	$V_R = 250$ VAC: 430 VDC, 1 s	
	$V_R = 400$ VAC: 700 VDC, 1 s	
AC test voltage	$V_R = 250$ VAC: 440 VAC, 1 s	
	$V_R = 400$ 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)	≤ 10 V/ μ 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.