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

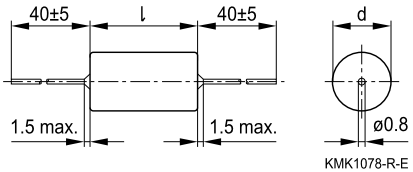
Terminals
- Axial leads, lead-free tinned
- Axial leads, insulated, tinned copper wires gathered together by a tin cover (fray), AWG 22

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

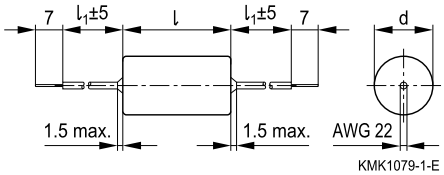
Delivery mode
Bulk (untaped)

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				

Ordering codes and packing units (tinned leads)

V_{rms} VAC	C_R µF	Max. dimensions d × 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} VAC	C_R µF	Max. dimensions d × 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 δ 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 ≤ 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 $\lvert\Delta C/C\rvert$	≤ 3%
	Dissipation factor change Δ tan δ	$\leq 0.5 \cdot 10^{-3}$ (at 1 kHz) $\leq 1.0 \cdot 10^{-3}$ (at 10 kHz)
	Time constant $\tau = C_R \cdot R_{ins}$	≥ 50% of minimum as-delivered values
Pulse handling capability (rate of voltage rise V_{pp}/τ)	≤ 10 V/µs	

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.