

# AC Film Capacitors, Motor Run Capacitors

Series/Type: B32332

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B32332I6505J081	B32332I6505J080	2014-11-28	2015-02-28	2015-05-31

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.



# Film Capacitors – AC Capacitors

B32330/B32332

## Motor run capacitors

B32330/B32332 - Super MotorCap™, 450 V

#### Construction

- Metallized polypropylene film
- Aluminum can with plastic top
- Soft polyurethane resin

#### **Applications**

 For general sine wave applications, mainly as motor run capacitor

#### **Features**

- Self-healing properties
- Low dissipation factor
- Highest safety level P2 to IEC 60252-1 2001-02
- Overpressure disconnection device
- High insulation resistance
- EN 60335-1 compliance on request

#### **Terminals**

- B32330 Single Fast-on: 6.3 x .8 mm / Single Fast-on 4.8 x 0.5
- B32332 Double Fast-on: 6.3 x 0.8 mm

### **Mounting parts (optional)**

■ Threaded stud at bottom of can (M8, max. torque = 5 Nm)

Technical data and specifications			
Reference standards	IEC 60252-1 2001-02, EN 60252 2001		
	UL 810		
Life expectance to IEC 60252 2001	450 V: 30,000 h (class A)		
Safety class according to IEC 60252-1 2001-02	P2		
UL 810 file E 106388	Approved component 10000 AFC protected up to 450 V		
Rated capacitance C <sub>R</sub>	See table ordering codes, page 6		
Tolerance	±5%		
Permitted capacitance ΔC/C	≤3%		
Rated voltage V <sub>R</sub>	450 V AC		
Rated frequency f <sub>R</sub>	50/60 Hz		



FILM AC RD Nov 2013



Film	Capacitors -	- AC	Canacitors
	GapaGilois -	- AU	Capacilois

B32330/B32332

**Motor run capacitors** 

B32330/B32332 - Super MotorCap™, 450 V

Maximum ratings					
Maximum permissible voltage V <sub>max</sub>	1.1 V <sub>R</sub> (V <sub>R</sub> = Rated voltage)				
Maximum permissible current I <sub>max</sub>	1.3 I <sub>R</sub> (I <sub>R</sub> = Rated current)				
Test data					
AC test voltage terminal to terminal V <sub>TT</sub>	2 V <sub>R</sub> , 2 s (routine test)				
	2 V <sub>R</sub> , 60 s (type test)				
AC test voltage terminals to can $V_{\text{TC}}$	2 kV AC, 2 s (routine test)				
	2 kV AC, 60 s (type test)				
Insulation resistance $R_{\text{ins}}$ or time constant $\tau$ at 20 °C, Rel. humidity max. value 85%, annual means $\leq$ 65%	3000 s				
Dissipation factor tan δ at 20 ℃	≤1.0 ·10 <sup>-3</sup> (120 Hz)				
Maximum rate of voltage rise dv/dt <sub>max</sub>	10 V/μs				
Climatic data	•				
Climatic category	25/085/21 to IEC 60068-1				
Lower category T <sub>min</sub>	–25 ℃				
Upper category T <sub>max</sub>	+85 ℃				
Damp heat test t <sub>test</sub>	21 days				
Mechanical and thermal properties					
Ball pressure test to IEC 60309-1 sec. 27.3	At 125 ℃				
Plastic can and top disk material	UL 94 V2 minimum				
■ UL 94 V2/V0 compatible					
■ Glow wire test to IEC 60335-1 / IEC 60695-2-1/1 Test temperature 550 °C / 750 °C	Self-extinguish within 2 seconds of withdrawing				
Part is compatible to EN 60335-1	glow wire				
Tracking test to IEC 60112 solution A	>250 V				
Compatibility to RoHS					
Compliance to directive 2002/95/EC	RoHS				

FILM AC RD Nov 2013



## Film Capacitors – AC Capacitors

B32330/B32332

#### Motor run capacitors

# B32330/B32332 - Super MotorCap™, 450 V

Approvals		
VDE EN 60252-1		
450 V / 85 °C:	30000 h (class A)	Approved up to 20 μF
TÜV EN 60252-1		
450 V / 85 ℃:	30000 h (class A)	Approved up to 50 μF
UL 810 E106388		Approved component 10000 AFC,
<sub>C</sub> <b>AL</b> <sub>US</sub>		protected up to 450 V
cec		Approved on request
Logistics		
Delivery mode		■ EU pallet as standard
		Cardboard tape on pallet
		■ Pack unit, see dimension table

#### Display of ordering codes for EPCOS products

The ordering code for one and the same product can be represented differently in data sheets, data books, other publications and the website of EPCOS, or in order-related documents such as shipping notes, order confirmations and product labels. The varying representations of the ordering codes are due to different processes employed and do not affect the specifications of the respective products. Detailed information can be found on the Internet under www.epcos.com/orderingcodes

### **Cautions and warnings**

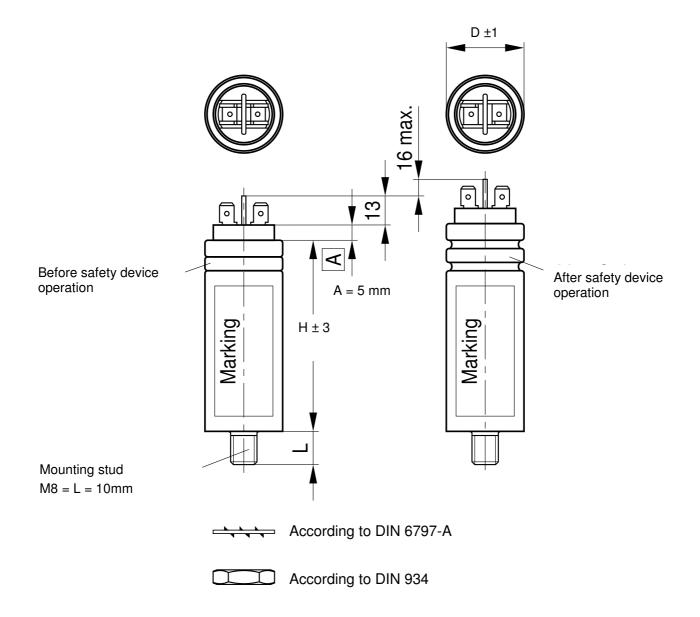
Please read "Applications warning, installation and maintenance instructions" and the "General Safety Data Sheet for Power Capacitors" issued by ZVEI, which are available on the internet at <a href="www.epcos.com/ac\_capacitors">www.epcos.com/ac\_capacitors</a>, to ensure optimum performance and to prevent products from failing, and in worst case, bursting and fire. Information given in the data sheet reflects typical specifications. You are kindly requested to approve our product specifications or request our approval for your specification before ordering.

FILM AC RD Nov 2013

Motor run capacitors

B32330/B32332 - Super MotorCap™, 450 V

## **Dimensional drawing**





# Film Capacitors – AC Capacitors

B32330/B32332

**Motor run capacitors** 

B32330/B32332 - Super MotorCap™, 450 V

### **Ordering codes**

V <sub>R</sub> V AC	CR	Dimensions	Ordering code	App	rovals	Class	Packaging	
	μF	D x H mm		VDE	TUV	UL	CQC	unit
	1	30 x 52	B3233*I6105J0#0	Α	Α	•	•	49
	1.5	30 x 52	B3233*I6155J0#0	Α	Α	•	•	49
	2	30 x 52	B3233*I6205J0#0	Α	Α	•	•	49
	2.5	30 x 52	B3233*I6255J0#1	Α	Α	•	•	49
	3	30 x 52	B3233*I6305J0#0	Α	Α	•	•	49
	3.5	30 x 52	B3233*I6355J0#0	Α	Α	•	•	49
	4	30 x 52	B3233*I6405J0#0	Α	Α	•	•	49
	5	30 x 52	B3233*I6505J0#1	Α	Α	•	•	49
	6	30 x 52	B3233*I6605J0#0	Α	Α	•	•	49
	7	30 x 52	B3233*I6705J0#0	Α	Α	•	•	49
	7.5	30 x 68	B3233*I6755J0#0	Α	Α	•	•	49
	8	30 x 68	B3233*I6805J0#0	Α	Α	•	•	49
	9	30 x 68	B3233*I6905J0#0	Α	Α	•	•	49
	10	30 x 68	B3233*I6106J0#0	Α	Α	•	•	49
450	11	30 x 78	B3233*I6116J0#0	Α	Α	•	•	49
450	12	30 x 78	B3233*I6126J0#0	Α	Α	•	•	49
	15	30 x 78	B3233*I6156J0#0	Α	Α	•	•	49
	17	30 x 93	B3233*I6176J0#0	Α	Α	•	•	49
	18	30 x 93	B3233*I6186J0#0	Α	Α	•	•	49
	20	30 x 93	B3233*I6206J0#1	Α	Α	•	•	49
	22	35 x 93	B3233*I6226J0#2		Α	•	•	36
	25	35 x 93	B3233*I6256J0#0		Α	•	•	36
	30	35 x 93	B3233*I6306J0#0		Α	•	•	36
	35	35 x 103	B3233*I6356J0#1		Α	•	•	36
	36	40 x 103	B3233*I6366J0#1		Α	•	•	36
	40	40 x 103	B3233*I6406J0#1		Α	•	•	36
	45	40 x 103	B3233*I6456J0#1		Α	•	•	36
	50	45 x 103	B3233*I6506J0#1		Α	•	•	25
	55	45 x 103	B3233*I6556J0#2			•	•	25
	60	45 x 103	B3233*I6606J0#2			•	•	25

#### Composition of ordering code

\*: terminals

construction of can and plastic top #:

0 single fast-on terminals 6 aluminum can: UL 94 V2/V0 top/IEC 60335-1

2 double fast-on terminals aluminum can with M 8 bolt: UL 94 V2/V0 top/IEC 60335-1

FILM AC RD



#### Important notes

The following applies to all products named in this publication:

- 1. Some parts of this publication contain statements about the suitability of our products for certain areas of application. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application. As a rule, EPCOS is either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether an EPCOS product with the properties described in the product specification is suitable for use in a particular customer application.
- 2. We also point out that in individual cases, a malfunction of electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified. In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health (e.g. in accident prevention or life-saving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of an electronic component.
- 3. The warnings, cautions and product-specific notes must be observed.
- 4. In order to satisfy certain technical requirements, some of the products described in this publication may contain substances subject to restrictions in certain jurisdictions (e.g. because they are classed as hazardous). Useful information on this will be found in our Material Data Sheets on the Internet (www.epcos.com/material). Should you have any more detailed questions, please contact our sales offices.
- 5. We constantly strive to improve our products. Consequently, the products described in this publication may change from time to time. The same is true of the corresponding product specifications. Please check therefore to what extent product descriptions and specifications contained in this publication are still applicable before or when you place an order. We also reserve the right to discontinue production and delivery of products. Consequently, we cannot guarantee that all products named in this publication will always be available. The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products.
- 6. Unless otherwise agreed in individual contracts, all orders are subject to the current version of the "General Terms of Delivery for Products and Services in the Electrical Industry" published by the German Electrical and Electronics Industry Association (ZVEI).
- 7. The trade names EPCOS, BAOKE, Alu-X, CeraDiode, CeraLink, CeraPlas, CSMP, CSSP, CTVS, DeltaCap, DigiSiMic, DSSP, FilterCap, FormFit, MiniBlue, MiniCell, MKD, MKK, MLSC, MotorCap, PCC, PhaseCap, PhaseCube, PhaseMod, PhiCap, SIFERRIT, SIFI, SIKOREL, SilverCap, SIMDAD, SiMic, SIMID, SineFormer, SIOV, SIP5D, SIP5K, ThermoFuse, WindCap are trademarks registered or pending in Europe and in other countries. Further information will be found on the Internet at www.epcos.com/trademarks.