



## Film Capacitors – AC Capacitors

### Motor run capacitors

**Series/Type:** B32329 – MotorCap

**Ordering code:** B32329

**Date:** September 2016

**Version:** 2

© EPCOS AG 2016. Reproduction, publication and dissemination of this publication, enclosures hereto and the information contained therein without EPCOS' prior express consent is prohibited.

EPCOS AG is a TDK Group Company.

**Construction**

- Metallized polypropylene film
- Plastic can and top UL 94 V2 material minimum
- Dry type

**Features**

- Self-healing properties
- Low dissipation factor
- S0 safety class to IEC60252-1 (ed.2) am1:
- High insulation resistance

**Typical applications**

- For general sine wave applications,  
Mainly as motor run capacitor

**Terminals**

- Insulated copper wire, 0.5mm<sup>2</sup> minimum

**Mounting parts (optional)**





- Threaded stud at bottom of can (M8, max. torque = 5 Nm)
- Locking clip for mounting into a hole of Ø 8 mm


**Technical data and specifications**

Reference standards	EN60252-1: 2014-07 IEC60252-1: Ed 2,2013-8, amendment 1
Safety class to IEC 60252-1/ 2013	S0
Life expectancy to IEC 60252-1 /2013	250 V/85 °C: 10000 h (class B) 400 V/85 °C: 10000 h (class B)
Rated capacitance C <sub>R</sub>	See table ordering code
Tolerance Tx	±5%
Rated voltage V <sub>rms</sub>	250 V AC, 400 V AC
Rated frequency f <sub>R</sub>	50/60 Hz

**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)

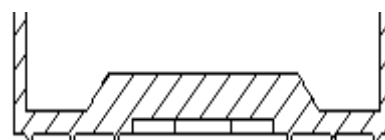
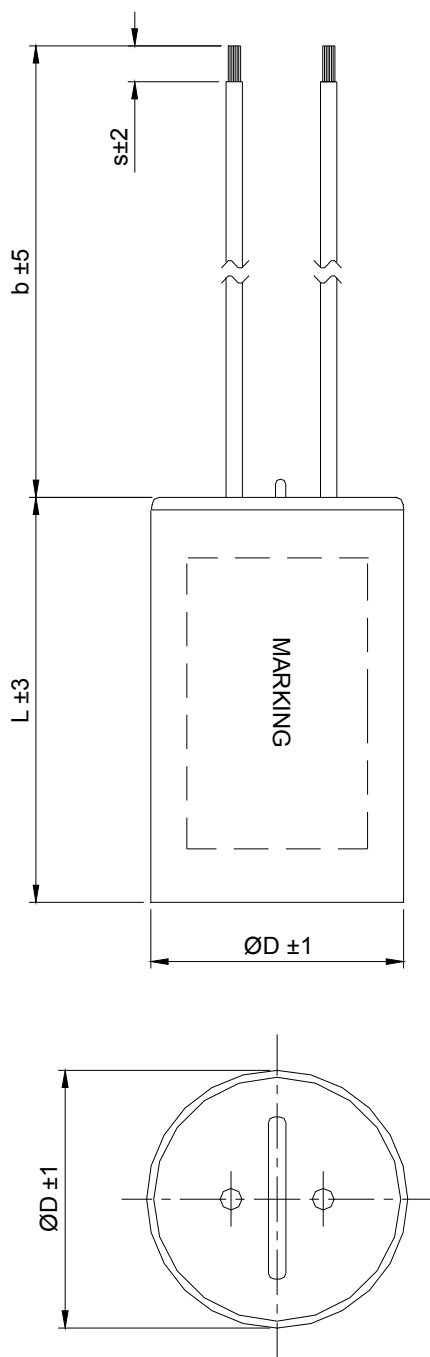
<b>Test data</b>	
AC test voltage terminal to terminal $V_{TT}$	2 • $V_R$ , 2 s (routine test) 2 • $V_R$ , 60 s (type test)
Insulation resistance $R_{ins}$ or time constant $\tau$ at 20 °C, rel. humidity $\leq 65\%$ (minimum as-delivered values)	3000 s
Dissipation factor $\tan \delta$ at 20 °C	$\leq 7.0 \cdot 10^{-3}$ (1 kHz)
Maximum rate of voltage rise $dV/dt_{max}$	10 V/ $\mu$ s
<b>Climatic data</b>	
Climatic category	25/085/21 to IEC 60068-1
Lower category $T_{min}$	-25° C
Upper category $T_{max}$	+85° C
Damp heat test $t_{test}$	21 days
<b>Mechanical and thermal properties</b>	
Ball pressure test to IEC 60309-1 sec. 27.3	20 N at 125 °C
Plastic can and top disk material	Compliant to IEC 60252-1
Option A: <ul style="list-style-type: none"> <li>■ UL 94 V2 compatible</li> <li>■ Glow wire test to IEC 60695-2-1/0 and -2-1/1            Test temp 550 °C for <math>I_R \leq 0.5</math> A            Test temp 850 °C for <math>I_R &gt; 0.5</math> A</li> </ul>	Self-extinguishing within 30 seconds of withdrawing the glow wire and without igniting wrapping tissue.
Tracking test to IEC 60112 solution A	> 250 V
<b>Compatibility to RoHS</b>	
Compliance to directive 2002/95/EC	
<b>Approvals</b>	
VDE EN 60252-1 	Approved 400V/85 °C: 10000h(class B) for 1.5 $\mu$ F to 50 $\mu$ F 480 V/85 °C: 3000h (class C) for 3 $\mu$ F to 35 $\mu$ F
 UL 810 files E183224 (Construction only)	Approved
	Compliance to LV directive 2014/35/EU

**Display of ordering codes for EPCOS products**

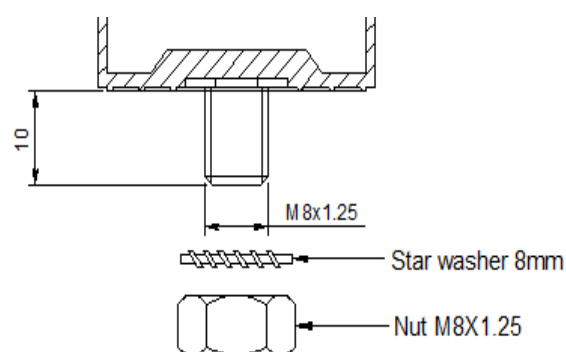
The ordering code for one and the same EPCOS product can be represented differently in data sheets, data books, other publications, on the EPCOS website, or in order-related documents such as shipping notes, order confirmations and product labels. **The varying representations of the ordering codes are 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](http://www.epcos.com/orderingcodes)

Dimensional drawings

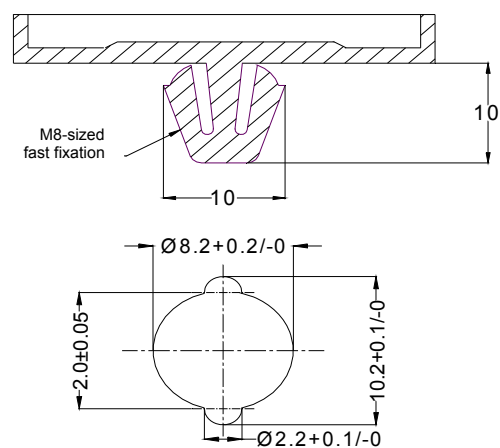
# = 1: Can without mounting



# = 1: Can with M8 bolt



# = 5: Locking clip



**Ordering codes and packing units**

Rated voltage $V_R$ V AC	Rated capacitance $C_R$ $\mu\text{F}$	Dimensions D × L mm	Ordering code	Approvals	Packing unit pcs.
250	1.5	25 × 58	B32329C1155J0#*	UL	112
	2	25 × 58	B32329C1205J0#*	UL	112
	3	25 × 58	B32329C1305J0#*	UL	112
	4	25 × 58	B32329C1405J0#*	UL	112
	5	25 × 58	B32329C1505J0#*	UL	112
	6	25 × 58	B32329C1605J0#*	UL	112
	7	25 × 58	B32329C1705J0#*	UL	112
	7.5	25 × 58	B32329C1755J0#*	UL	112
	8	25 × 58	B32329C1805J0#*	UL	112
	9	30 × 62	B32329C1905J0#*	UL	112
	10	30 × 62	B32329C1106J0#*	UL	112
	12	30 × 62	B32329C1126J0#*	UL	112
	14	30 × 62	B32329C1146J0#*	UL	112
	15	30 × 62	B32329C1156J0#*	UL	112
	16	35 × 62	B32329C1166J0#*	UL	84
	18	35 × 62	B32329C1186J0#*	UL	84
	20	35 × 62	B32329C1206J0#*	UL	84
	22	35 × 62	B32329C1226J0#*	UL	84
	25	35 × 71	B32329C1256J0#*	UL	84
	30	35 × 71	B32329C1306J0#*	UL	84
	35	40 × 71	B32329C1356J0#*	UL	60
	40	40 × 71	B32329C1406J0#*	UL	60
	45	40 × 71	B32329C1456J0#*	UL	60
	50	40 × 96	B32329C1506J0#*	UL	60
55	40 × 96	B32329C1556J0#*	UL	60	
60	40 × 96	B32329C1606J0#*	UL	60	

Rated voltage $V_R$ V AC	Rated capacitance $C_R$ $\mu\text{F}$	Dimensions D x L mm	Ordering code	Approvals	Packing unit pcs.
400	1.5	25 x 58	B32329B4155J0#*	VDE,UL	112
	2	25 x 58	B32329B4205J0#*	VDE,UL	112
	3	25 x 58	B32329B4305J0#*	VDE,UL	112
	4	25 x 58	B32329B4405J0#*	VDE,UL	112
	5	30 x 62	B32329B4505J0#*	VDE,UL	112
	6	30 x 62	B32329B4605J0#*	VDE,UL	112
	7	35 x 62	B32329B4705J0#*	VDE,UL	84
	8	35 x 62	B32329B4805J0#*	VDE,UL	84
	9	35 x 62	B32329B4905J0#*	VDE,UL	84
	10	35 x 62	B32329B4106J0#*	VDE,UL	84
	12	35 x 71	B32329B4126J0#*	VDE,UL	84
	14	35 x 71	B32329B4146J0#*	VDE,UL	84
	15	40 x 71	B32329B4156J0#*	VDE,UL	60
	16	40 x 71	B32329B4166J0#*	VDE,UL	60
	18	40 x 71	B32329B4186J0#*	VDE,UL	60
	20	40 x 71	B32329B4206J0#*	VDE,UL	60
	22	40 x 96	B32329B4226J0#*	VDE,UL	60
	25	40 x 96	B32329B4256J0#*	VDE,UL	60
	30	40 x 96	B32329B4306J0#*	VDE,UL	60
	35	45 x 96	B32329B4356J0#*	VDE,UL	45
40	45 x 96	B32329B4406J0#*	VDE,UL	45	
45	50 x 96	B32329B4456J0#*	VDE,UL	32	
50	50 x 96	B32329B4506J0#*	VDE,UL	32	
55	50 x 96	B32329B4556J0#*	UL	32	
60	50 x 96	B32329B4606J0#*	UL	32	

**Composition of ordering code:**

#: construction

- 1 plastic can
- 3 plastic can with M8 bolt
- 5 plastic can with locking clip, available for diameters 30 mm, 32 mm and 35 mm, others on request

\*: Wire length (dimension 'b', s in drawing)

Note: Dimension "b" and "s" will vary as per requirement.

**Cautions and warnings**

Please read "Applications warning, installation and maintenance instructions" and the "ZVEI - General safety recommendations for power capacitors", which are available on the Internet at [www.epcos.com/ac\\_capacitors](http://www.epcos.com/ac_capacitors), 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.

## 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 we are 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 a 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.tdk-electronics.tdk.com/material](http://www.tdk-electronics.tdk.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 our General Terms and Conditions of Supply**.
7. **Our manufacturing sites serving the automotive business apply the IATF 16949 standard**. The IATF certifications confirm our compliance with requirements regarding the quality management system in the automotive industry. Referring to customer requirements and customer specific requirements ("CSR") TDK always has and will continue to have the policy of respecting individual agreements. Even if IATF 16949 may appear to support the acceptance of unilateral requirements, we hereby like to emphasize that **only requirements mutually agreed upon can and will be implemented in our Quality Management System**. For clarification purposes we like to point out that obligations from IATF 16949 shall only become legally binding if individually agreed upon.
8. The trade names EPCOS, CeraCharge, CeraDiode, CeraLink, CeraPad, CeraPlas, CSMP, CTVS, DeltaCap, DigiSiMic, ExoCore, FilterCap, FormFit, LeaXield, MiniBlue, MiniCell, MKD, MKK, MotorCap, PCC, PhaseCap, PhaseCube, PhaseMod, PhiCap, PowerHap, PQSine, PQvar, SIFERRIT, SIFI, SIKOREL, SilverCap, SIMDAD, SiMic, SIMID, SineFormer, SIOV, ThermoFuse, WindCap are **trademarks registered or pending** in Europe and in other countries. Further information will be found on the Internet at [www.tdk-electronics.tdk.com/trademarks](http://www.tdk-electronics.tdk.com/trademarks).

Release 2018-10