



Film Capacitors – AC Capacitors

Motor run capacitors

Series/Type: B32355 – MotorCap™ P2 Compact
Ordering code: B32355
Date: October 2010
Version: 5

Construction

- Dielectric: polypropylene film
- Electrode: segmented metallized film
- Dry type

Features

- Self-healing properties
- Low dissipation factor
- P2 safety class to IEC 60252-1 2001-02
- High insulation resistance
- IEC/EN 60335-1 compatible

Typical applications

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

Terminals



- Insulated flexible copper wire as standard
- Crimping or receptacles on request

Mounting parts (optional)

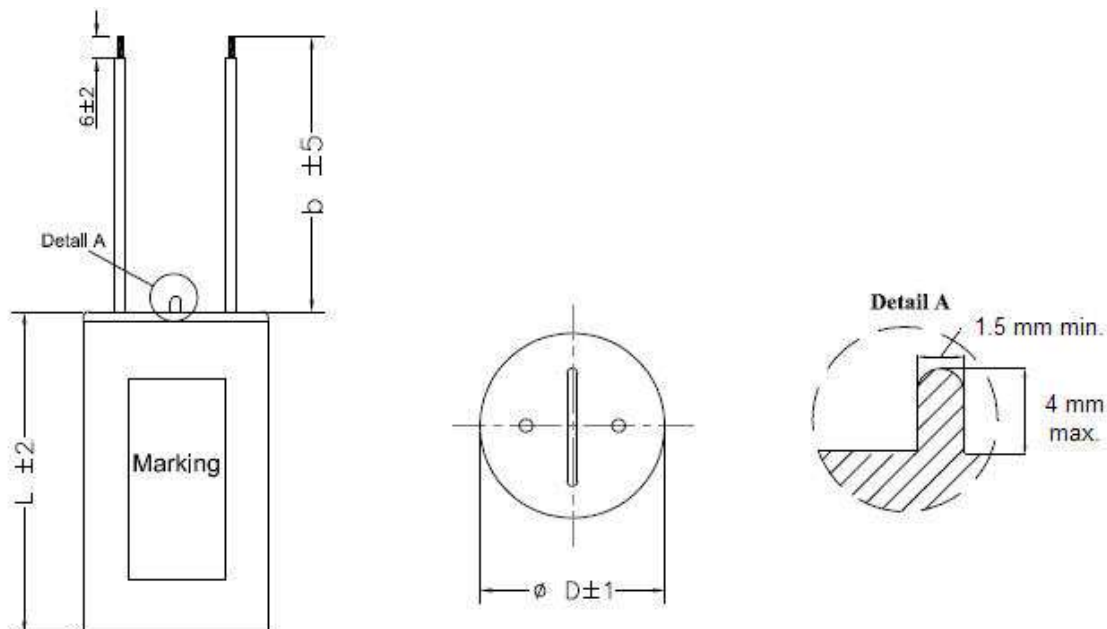
- Threaded stud at bottom of can (M8, max. torque = 5 Nm)
- Fast fixation for mounting into a hole of Ø 8 mm
- Mounting in any position possible



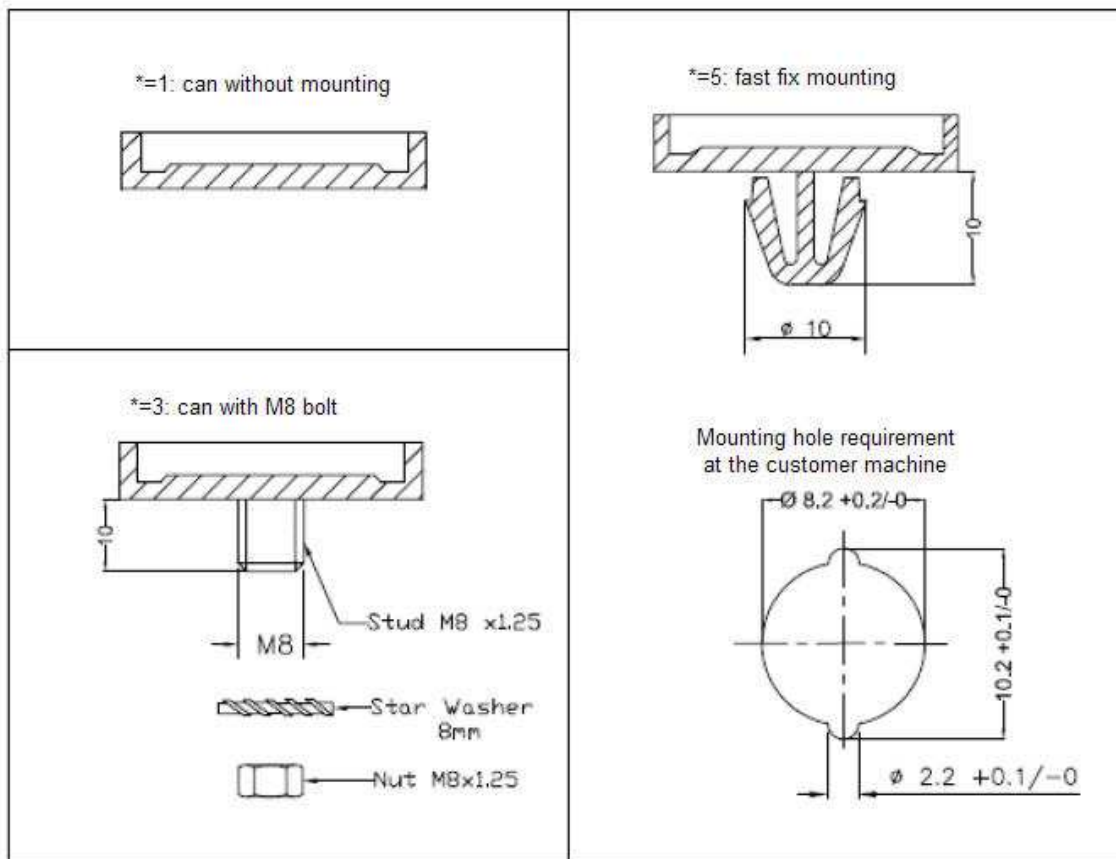
Technical data and specifications	
Reference standards	IEC 60252-1 2001-02 / EN 60252 2001
Safety class to IEC 60252-1 2001-02	P2
Life expectancy to IEC 60252 2001	400 V/85 °C: 30 000 h (class A) 450 V/85 °C: 10 000 h (class B)
Rated capacitance C_R	See dimensions table
Tolerance	±5%
Rated voltage V_R	400, 450 V AC
Rated frequency f_R	50/60 Hz
Maximum ratings	
Maximum permissible voltage V_{max}	$1.1 \cdot V_R$ (V_R = rated voltage)
Maximum permissible current I_{max}	$1.3 \cdot I_R$ (I_R = rated current)

Test data	
AC test voltage terminal to terminal V_{TT}	2 · V_R , 2 s (routine test) 2 · V_R , 60 s (type test)
AC Test voltage terminals to can V_{TC}	2 kV AC, 2 s (routine test) 2 kV AC, 60 s (type test)
Insulation resistance R_{ins} or time constant τ at 20 °C, rel. humidity $\leq 65\%$ (minimum as-delivered values)	3 000 s
Dissipation factor $\tan \delta$ at 20 °C	$\leq 1.0 \cdot 10^{-3}$ (120 Hz)
Maximum rate of voltage rise dV/dt_{max}	10 V/ μ s
Climatic data	
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
Mechanical and thermal properties	
Ball pressure test to IEC 60309-1 sec. 27.3	20 N at 125 °C
Plastic can and top disk material	Compliant to EN 60252/60335-1
<ul style="list-style-type: none"> ■ UL 94 V2 compatible ■ Glow wire test to IEC 60695-2-1/0 and -2-1/1 Test temperature 550 °C for $I_R \leq 0.5$ A Test temperature 750 °C for $I_R > 0.5$ A ■ Part is compatible to EN 60335-1 	Self-extinguish within 2 seconds of withdrawing glow wire without igniting wrapping tissue to GWIT.
Tracking test to IEC 60112 solution A	> 250 V
Compatibility to RoHS	
Compliance to directive 2002/95/EC	
Approvals	
VDE – 400 V/85 °C: 30 000 h (class A)	Approved
VDE – 450 V/85 °C: 10 000 h (class B)	Approved
 US UL 810 files E106388	Approved Component 10000 AFC up to 450 V

Dimensional drawings



Mounting options



Ordering codes and packing units

U _N V AC	C _N μF	Dimensions d × h mm	Ordering code	Packing unit
400 / 450	2	25 × 50*	B32355A4205J0#&	112
	2.5	25 × 50*	B32355A4255J0#&	112
	3	30 × 56*	B32355A4305J0#&	112
	3.15	30 × 56*	B32355A4315J5#&	112
	4	30 × 56*	B32355A4405J0#&	112
	5	30 × 56*	B32355A4505J0#&	112
	6	35 × 56*	B32355A4605J0#&	84
	6.3	35 × 56*	B32355A4635J0#&	84
	7	35 × 56*	B32355A4705J0#&	84
	7.5	35 × 56*	B32355A4755J0#&	84
	8	35 × 71	B32355A4805J0#&	84
	9	35 × 71	B32355A4905J0#&	84
	10	35 × 71	B32355A4106J0#&	84
	11	40 × 72	B32355A4116J0#&	60
	12	40 × 72	B32355A4126J0#&	60
	12.5	40 × 72	B32355A4126J5#0	60
	14	45 × 72	B32355A4146J0#&	45
	15	45 × 72	B32355A4156J0#&	45
	16	45 × 96	B32355A4166J0#&	45
	17.5	45 × 96	B32355A4176J5#0	45
18	50 × 96	B32355A4186J0#&	32	
20	50 × 96	B32355A4206J0#&	32	

* In case of construction with M8 bolt and locking clip height (dimension L) will be increased by 6 mm for 30 to 35 mm diameter, and 8 mm for 25 mm diameter can size

Composition of ordering code:


#: construction

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

&: wire length (dimension 'b' in drawing)

- 3 100 mm
- 7 200 mm
- 9 250 mm

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 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. You are kindly requested to approve our product specifications or request our approval for your specification before ordering.

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