

**Ordering code:** OBIC 70-200.0 cv5 (J)  
**Applications:** MKP-1 AC/DC capacitor for general use in power electronics also for nonsinusoidal voltages and currents

**Standard:** acc. to IEC 61071:2007

**Approval mark:**  UL 810 - protected 10,000 AFC +85°C  
 CSA C22.2 No. 190 -M1985 - ambient max. 46°C

**Characteristics**

Rated capacitance	<b>C<sub>N</sub></b>	200 µF ±5%
Rated a.c. voltage	<b>U<sub>N AC</sub></b>	420 V a.c.
Rated d.c. voltage	<b>U<sub>N DC</sub></b>	700 V d.c.
Max. rms voltage (sinusoidal)	<b>U<sub>rms</sub></b>	300 V
Non-recurrent surge voltage	<b>u<sub>s</sub></b>	1050 V
Rated energy	<b>W<sub>N</sub></b>	49 Ws
Maximum current	<b>I<sub>max</sub></b>	40 A
Maximum peak current	<b>I<sub>̂</sub></b>	1.2 kA
Maximum surge current	<b>I<sub>s</sub></b>	3.6 kA
Series resistance	<b>R<sub>s</sub></b>	4.4 mΩ
dielectric dissipation factor	<b>tanδ<sub>o</sub></b>	2 x 10 <sup>-4</sup>
insulation strength	<b>C x R<sub>is</sub></b>	5000 s
Self inductance	<b>L<sub>e</sub></b>	140 nH

**thermal characteristics**

Lowest operating temperature	<b>Θ<sub>min</sub></b>	-25 °C
Maximum operating temperature	<b>Θ<sub>max</sub></b>	85 °C

storing temperature	<b>Θ<sub>storage</sub></b>	-40..+85 °C
thermal resistance	<b>R<sub>th</sub></b>	4.7 K/W

**Test voltages**

test voltage between terminals	<b>U<sub>TT</sub></b>	1050 V DC/10s
A.C. voltage test terminal/case	<b>U<sub>TC</sub></b>	3000 V AC/10s

**Statistical lifetime** >200000 h

**Failure rate** <100 FIT\*  
 at Θ<sub>hotspot</sub> ≤70 °C

\* See FIT-RATE diagram on pg.4

**Dimensions**

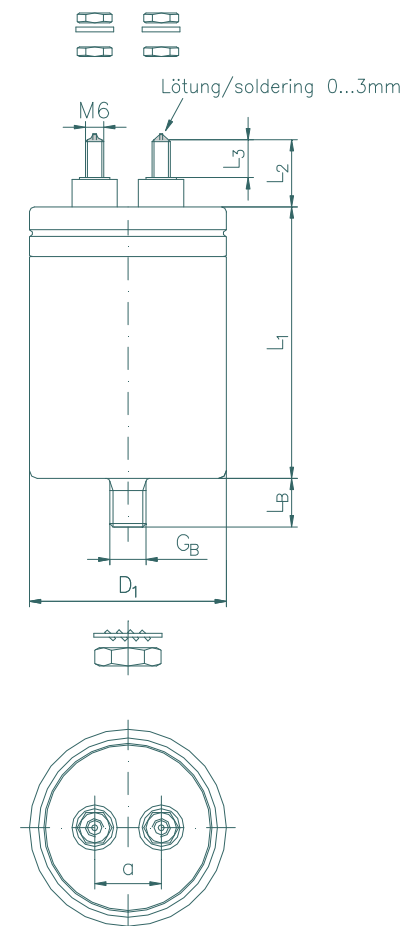
Rated diameter	<b>D<sub>1</sub></b>	65 (±1)	mm
Length of the case	<b>L<sub>1</sub></b>	145 (±2)	mm
Length of the terminals	<b>L<sub>2</sub></b>	23 (-2)	mm
Length of the terminals	<b>L<sub>3</sub></b>	12.5 (±1)	mm
distance btw. terminals	<b>a</b>	22 (±1)	mm
Terminal		M6 x12.5 mm	
base mounting stud	<b>G<sub>B</sub>xL<sub>B</sub></b>	M12x16 (+1)	mm
Clearance in air	<b>L</b>	10 mm	
Creepage distance	<b>K</b>	21 mm	

**Approx weight** 0.5 kg

**Mechanical characteristics**

Dielectric	metallized polypropylene capacitor, selfhealing
Construction	aluminium can, plastic with rubber sealing, flanged can
Protection	overpressure disconnecter
Terminals	threaded stud M6 on integrated plastic
Impregnant	liquid impregnants, no PCB
Fire load	20MJ

**outline drawing**



**permitted power losses during continuous operation**

