


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 | C_N | 200 µF ±5% |
| Rated a.c. voltage | U_{N AC} | 420 V a.c. |
| Rated d.c. voltage | U_{N DC} | 700 V d.c. |
| Max. rms voltage (sinusoidal) | U_{rms} | 300 V |
| Non-recurrent surge voltage | u_s | 1050 V |
| Rated energy | W_N | 49 Ws |
| Maximum current | I_{max} | 40 A |
| Maximum peak current | I_̂ | 1.2 kA |
| Maximum surge current | I_s | 3.6 kA |
| Series resistance | R_s | 4.4 mΩ |
| dielectric dissipation factor | tanδ₀ | 2 x 10 ⁻⁴ |
| insulation strength | C x R_{is} | 5000 s |
| Self inductance | L_e | 140 nH |

thermal characteristics

| | | |
|-------------------------------|----------------------------|-------------|
| Lowest operating temperature | Θ_{min} | -25 °C |
| Maximum operating temperature | Θ_{max} | 85 °C |
| storing temperature | Θ_{storage} | -40..+85 °C |
| thermal resistance | R_{th} | 4.7 K/W |

Test voltages

| | | |
|---------------------------------|-----------------------|---------------|
| test voltage between terminals | U_{TT} | 1050 V DC/10s |
| A.C. voltage test terminal/case | U_{TC} | 3000 V AC/10s |

Statistical lifetime >200000 h

Failure rate <100 FIT*
 at Θ_{hotspot} ≤70 °C

* See FIT-RATE diagram on pg.4

Dimensions

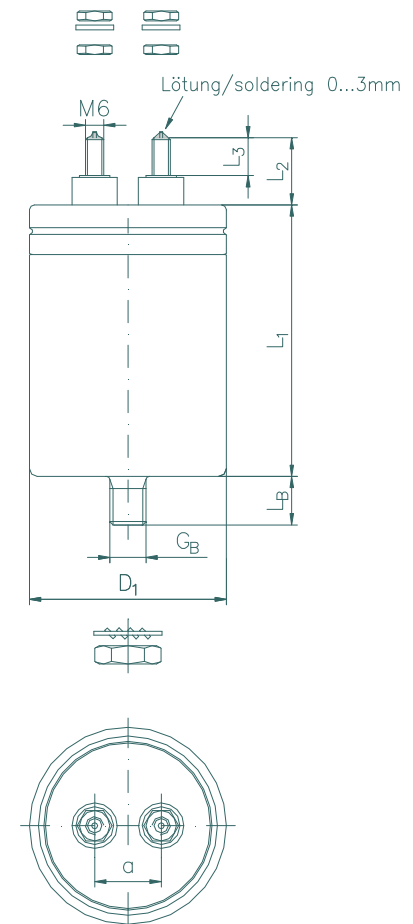
| | | | |
|-------------------------|------------------------------------|-------------|----|
| Rated diameter | D₁ | 65 (±1) | mm |
| Length of the case | L₁ | 145 (±2) | mm |
| Length of the terminals | L₂ | 23 (-2) | mm |
| Length of the terminals | L₃ | 12.5 (±1) | mm |
| distance btw. terminals | a | 22 (±1) | mm |
| Terminal | | M6 x12.5 mm | |
| base mounting stud | G_BxL_B | M12x16 (+1) | mm |
| Clearance in air | L | 10 mm | |
| Creepage distance | K | 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

