

Ordering code: OBIC 490-37.0 cv5 (K)
Applications: MKP-1 AC/DC capacitor for general use in power electronics also for nonsinusoidal voltages and currents
Standard: acc. to IEC 61071:2007

Characteristics

Rated capacitance	C_N	37 µF ±10%
Rated a.c. voltage	U_{NAC}	3000 V a.c.
Rated d.c. voltage	U_{NDC}	4900 V d.c.
Max. rms voltage (sinusoidal)	U_{rms}	2100 V
Non-recurrent surge voltage	u_s	7350 V
Rated energy	E_N	444.2 Ws
Maximum current	I_{max}	100 A
Maximum peak current	I_̂	6.3 kA
Maximum surge current	I_s	18.9 kA
Series resistance	R_s	1.1 mΩ
Dielectric dissipation factor	tanδ_o	2 × 10 ⁻⁴
Self discharge time constant	C × R_{is}	>25000 s
Self inductance	L_e	190 nH

Thermal characteristics

Lowest operating temperature	Θ_{min}	-40 °C
Maximum operating temperature	Θ_{max}	85 °C
Storage temperature	Θ_{storage}	-40..+85 °C
Thermal resistance	R_{th}	1 K/W

Routine test voltages

Voltage test between terminals	U_{TT}	7350 V DC/10s
Voltage test terminals to case	U_{TC}	8000 V AC/10s

Statistical lifetime

		>200000 h
Failure rate		<100 FIT*
at Θ _{hotspot}		≤70 °C

* See FIT-RATE diagram on p.4

Dimensions

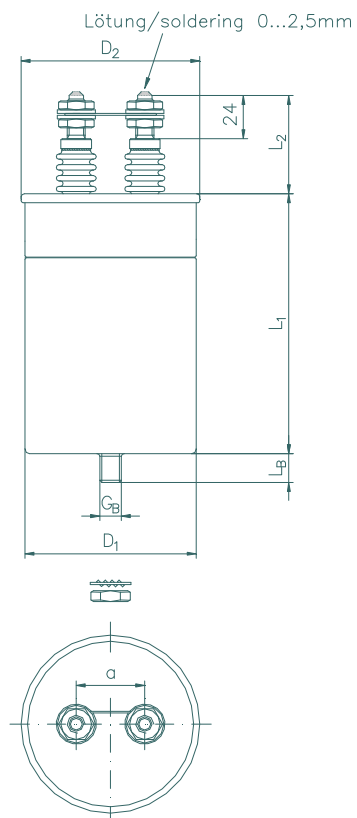
Rated diameter	D₁	136 (±1)	mm
Maximum diameter	D₂	140.7 (±0.5)	mm
Length of the case	L₁	320 (±2)	mm
Length of the terminals	L₂	51 (±2)	mm
Distance btw. terminals	a	38 (±1)	mm
Terminal		M10 x20	mm
Base mounting stud	G_B × L_B	M12x16 (+1)	mm
Clearance in air	L	17	mm
Creepage distance	K	54	mm

Approx. weight 4.9 kg

Mechanical characteristics

Dielectric	metallized polypropylene capacitor, selfhealing
Construction	aluminium can, flanged copper (folded edge)
Protection	BAM™ overpressure break action mechanism
Terminals	screw terminals on ceramic insulators
Impregnant	liquid impregnant, no PCB
Fire load	196MJ

Outline drawing



Permitted power losses during continuous operation

