

Applications: 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	40 µF ±5%
Rated a.c. voltage	U_{N AC}	680 V a.c.
Rated d.c. voltage	U_{N DC}	1120 V d.c.
Max. rms voltage (sinusoidal)	U_{rms}	480 V
Non-recurrent surge voltage	u_s	1680 V
Rated energy	W_N	25.1 Ws
Maximum current	I_{max}	25 A
Maximum peak current	I_̂	0.44 kA
Maximum surge current	I_s	1.32 kA
Series resistance	R_s	5.9 mΩ
dielectric dissipation factor	tanδ_o	2 x 10 ⁻⁴
insulation strength	C x R_{is}	5000 s
Self inductance	L_e	120 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}	7.2 K/W

test parameters

test voltage between terminals	U_{TT}	1680 V DC/10s
A.C. voltage test terminal/container	U_{TC}	3000 V AC/10s

failure rate

reference service life	100 FIT*
at Θ _{hotspot}	100000 h
	≤70 °C

* See FIT-RATE diagram on pg.4

Dimensions

Rated diameter	D₁	50 (+1)	mm
Length of the case	L₁	124 (±2)	mm
Length of the terminals	L₂	23 (+5)	mm
distance 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	15	mm

Approx weight 0.3 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	12MJ

outline drawing

