

Ordering code:

DTIC 200-4.0 cv5 (J)

Applications:

AC/DC capacitor for general use in power electronics
also for nonsinusoidal voltages and currents

Standard:

acc. to IEC 61071:2007

outline drawing

Characteristics

Rated capacitance	C_N	4 $\mu\text{F} \pm 5\%$
Rated d.c. voltage	$U_{N\ DC}$	2000 V d.c.
Rated a.c. voltage	$U_{N\ AC}$	2000 V a.c.
Max. rms voltage (sinusoidal)	U_{rms}	1400 V
Non-recurrent surge voltage	U_s	4300 V
Rated energy	W_N	8 Ws
Maximum current	I_{max}	80 A
Maximum peak current	\hat{I}	2.1 kA
Maximum surge current	I_s	6 kA
Series resistance	R_s	1.1 m Ω
dielectric dissipation factor	$\tan\delta_0$	2×10^{-4}
insulation strength	$C \times R_{is}$	10000 s
Self inductance	L_e	30 nH

thermal characteristics

lower category temperature	Θ_{min}	-25 °C
upper category temperature	Θ_{max}	85 °C
thermal resistance	R_{th}	4.8 K/W
storing temperature	$\Theta_{storage}$	-55..+85 °C

test parameters

test voltage between terminals	U_{TT}	4300 V DC/10s
A.C. voltage test terminals/case	U_{TC}	6000 V AC/10s

Statistical lifetime

failure rate	> 200000 h
at $\Theta_{hotspot}$	< 100 FIT*
	≤ 70 °C

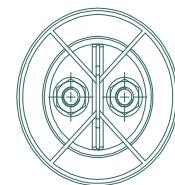
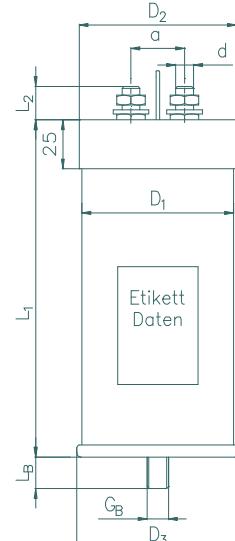
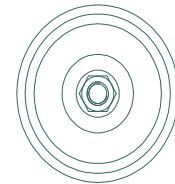
* See FIT-RATE diagram on pg.4

Dimensions

Rated diameter	D_1	85 (± 1) mm
diameter Lid	D_2	88 (± 1) mm
Maximum diameter	D_3	90.5 (± 1) mm
Length of the case	L_1	109 (± 2) mm
Length of the terminals	L_2	22 (-1,5) mm
distance btw. terminals	a	30 (± 1) mm
Terminal	d	M10
base mounting stud	$G_B \times L_B$	M12x16 (+1) mm
Clearance in air	L	24 mm
Creepage distance	K	50 mm
Approx weight		0.7 kg

Mechanical characteristics

Dielectric	metallized polypropylene capacitor, selfhealing
Construction	metal can, plastic cover rated V0 acc. to UL94
Protection	without internal fuse, to be used only in uncritical environment
Terminals	threaded stud
Impregnant	no liquid impregnants, filled with solidified PUR resin, non PCB
Location	allowed to be used in mineral oil
Fire load	28MJ



permitted power losses during continuous operation

