

Application:

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

Order code:

DTIC 2000-050 64255

Standards:

acc. to IEC 61071:2007

Characteristics

Rated capacitance	C_N	0.05 μF ±5%
Rated d.c. voltage	U_{N DC}	20000 V
Rated a.c. voltage	U_{N AC}	7900 V
Max. rms voltage (sinusoidal)	U_{rms}	5600 V
Non-recurrent surge voltage	u_s	30000 V
Rated energy	W_N	10 Ws
Maximum current	I_{max}	10 A
Maximum peak current	î	0.56 kA
Maximum surge current	I_s	1.68 kA
Series resistance	R_s	18.4 mΩ
Tangent of the loss angle	tanδ_o	2 x 10 ⁻⁴
Self discharge time const.	C x R_{is}	10000 s
Self-inductance	L_e	50 nH

Thermal conditions

Lowest operating temperature	Θ_{min}	-25 °C
Maximum operating temperature	Θ_{max}	70 °C
Thermal resistance	R_{th}	4.56 K/W
Storage temperature	Θ_{storage}	-40..+85 °C

Test data

Voltage test between terminals **U_{BB}** 30000 V DC/10s

failure rate

reference service life 100 FIT*
at Θ_{hotspot} 100000 h
≤ 70 °C
* See FIT-RATE diagram on pg.3

Dimensions

Rated diameter	D₁	64 (±1) mm
Diameter of terminals	D₂	20 (±0.5) mm
Length of the case	L₁	255 (±2) mm
Total length	L₂	263 (±2) mm
Terminal		M8x12 mm
Clearance in air	L	299 mm
Creepage distance	K	299 mm
Approx weight	m ca.	0.9 kg

Mechanical characteristics

Construction MKP- metallized polypropylene capacitor, self-healing, plastic case, UL94:V0
Fuse without internal fuse, to be used only in uncritical environment
Terminals Screw terminals
Impregnant no liquid impregnants, filled with solidified PUR resin, non PCB
Fire load 34MJ

Maximum permissible voltage

(Maximum within one day)

30% of on-load duration	22000V
30min	23000V
5min	24000V
1min	26000V
100ms	30000V

outline drawing

