

Order code: DTIC 300-1100 r (K)
Application: 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	1100 µF ±10%
Rated d.c. voltage	U_{NDC}	3000 V d.c.
Rated a.c. voltage	U_{NAC}	1700 V a.c.
Insulation voltage	U_i	2200 V
Non-recurrent surge voltage	u_s	4500 V
Rated energy	W_N	5000 Ws
Maximum current	I_{max}	250 A
Maximum peak current	î	50 kA
Maximum surge current	I_s	150 kA
Series resistance	R_s	0.35 mΩ
Tangent of the loss angle	tanδ_o	2 x 10 ⁻⁴
Self discharge time const.	C x R_{is}	10000 s
Self inductance	Le	~ 120 nH
Resonance frequency	f_r	~ 14 kHz

Thermal conditions

Lowest operating temperature	Θ_{min}	-25 °C
Maximum operating temperature	Θ_{max}	70 °C
Thermal resistance	R_{th}	0.3 K/W
Maximum power loss	P_{max}	at Θ _{amb}
	53 W	55 °C
	36 W	60 °C
	18 W	65 °C
	0 W	70 °C
Storage temperature	Θ_{storage}	-40...+85 °C
Humidity class		C

Service life

Load duration	100000 h
at Θ _{hotspot}	≤ 0 °C
Failure quota	100 FIT

Test data

Voltage test between terminals	U_{BB}	4500 V DC/10s
A.C. voltage test terminal/contai	U_{BG}	5400 V AC/10s

Dimensions

Height of the case	H	815 mm
Length of the case	L	340 mm
Width of the case	B	140 mm
Distance of terminals	a	140 mm
Height of the brackets	H₁	665 mm
Clearance in air	L	45 mm
Creepage distance	K	120 mm

Approx weight 47 kg

Mechanical characteristics

Construction	AC/DC - metallized polypropylene capacitor, self-healing, metallic case
Protection	without internal fuse, to be used only in uncritical environment
Impregnant	dry type ,resin moulded (Non PCB)
Fire load	1800MJ

outline drawing

