

Type: EC450μ1100d085140KF8

Technical data

Nominal capacitance	C_N	450 $\mu\text{F} \pm 10\%$
Nominal voltage dc	U_{NDC}	1100 V
Surge voltage	U_S	1650 V
Energy	W_N	272,25 Ws
Max. AC current @ $T_{\text{case}}=30^\circ\text{C}/10\text{ kHz}$	I_{RMS}	64 A
Max. Peak periodic current	$\hat{I}_{\text{Periodic}}$	2,6 kA
Max. Pulse rise time	$\Delta U/\Delta t$	5,9 V/ μs
Dissipation factor @ 1 kHz	$\tan\delta$	<200 $\times 10^{-4}$
Series resistance @ 10 kHz	R_{ESR}	<5 m Ω

Max. Power loss @ $\vartheta_{\text{hotspot}} 85^\circ\text{C}$ / nat. convection / 10kHz

@ ϑ_{case}	I	P _{max}
40°C	58,0 A	17,6 W
50°C	51,2 A	13,7 W
60°C	43,5 A	9,8 W
70°C	21,1 A	5,9 W

U_N -Derating

@ ϑ_{case}	U_{Nmax}
70°C	$U_N \times 1$
75°C	$U_N \times 0,9$
80°C	$U_N \times 0,8$
85°C	$U_N \times 0,7$

Min. Operating temperature	ϑ_{min}	-40 °C
Max. Operating temperature ($I_R=0$)	ϑ_{max}	+85 °C
Storage temperature	ϑ_{Lager}	-40...+70 °C
Thermal resistance (case hotspot)	R_{th}	2,1 K/W
Climatic category DIN IEC 68/1		40/070/21

Test voltage between terminals	U_{TT}	1650 V dc / 2s
Test voltage between terminal/case	U_{TC}	3200 V ac / 10s

Life expectancy @ hot spot 60°C 100 000 h

General data

Coating	aluminium case with resin sealing Flame retardant according to UL 94V-0
Dielectric	polypropylene
Terminals	brass nickel plated M8x13mm, max. torque 6 Nm
Weight	approx. 1,1kg

RoHS compliant

Dimensions

Diameter	\varnothing	85,0	+0,3 mm
Length	L	145,0	$\pm 0,5$ mm
Pitch	RM	45	± 1 mm

