

Data Sheet

Type: EC550µ900d085136KF6

date: 23/10/2012 08:10:00

Technical data

Nominal capacitance	C_N	550 µF ± 10%
Nominal voltage dc	U_{NDC}	900 V
Surge voltage	U_S	1350 V
Energy	W_N	223 Ws
Max. AC current @ $T_{case}=30^\circ\text{C}/10\text{ kHz}$	I_{RMS}	54 A
Max. Peak periodic current	$\hat{I}_{periodic}$	5,3 kA
Max. Pulse rise time	$\Delta U/\Delta t$	9,7 V/µs
Dissipation factor @ 1 kHz	$\tan\delta$	<200 × 10 ⁻⁴
Series resistance @ 10 kHz	R_{ESR}	<4,7 mΩ

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

@ ϑ_{case}	I	P_{max}
40°C	49 A	11 W
50°C	43 A	8,8 W
60°C	39 A	6,3 W
70°C	28 A	3,8 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...+85 °C
Thermal resistance (case hotspot)	R_{th}	2 K/W
Climatic category DIN IEC 68/1		40/085/21

Test voltage between terminals	U_{TT}	1350 V dc / 2s
Test voltage between terminal/case	U_{TC}	2800 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 M6, max. torque 6 Nm
Weight	approx. 1kg
RoHS compliant	

Dimensions

Diameter	Ø	85,0	+0,3 mm
Length	L	136,0	±0,5 mm
Pitch	RM	32,0	±1 mm

