

## Preliminary

**Type: EC5m600d116295KF6**

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**Part-No: 820003962**

### Technical data

Nominal capacitance	$C_N$	5000	$\mu\text{F} \pm 10\%$
Nominal voltage dc	$U_{\text{NDC}}$	500	V
Surge voltage	$U_S$	750	V
Energy	$W_N$	625	Ws
Max. AC current @ $T_{\text{case}}=30^\circ\text{C}/10\text{ kHz}$	$I_{\text{RMS}}$	100	A
Max. Peak periodic current	$\hat{I}_{\text{Periodic}}$	26	kA
Max. Pulse rise time	$\Delta U/\Delta t$	5,2	V/ $\mu\text{s}$
Dissipation factor @ 1 kHz	$\tan\delta$	<250	$\times 10^{-4}$
Equivalent series resistance @ 10 kHz	$R_{\text{ESR}}$	<1	m $\Omega$

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

@ $\vartheta_{\text{case}}$	I	P <sub>max</sub>
40°C	100 A	7,2 W
50°C	100 A	5,6 W
60°C	84 A	4 W
70°C	65 A	2,4 W

$U_N$ -Derating

@ $\vartheta_{\text{case}}$	$U_{\text{Nmax}}$
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	$\vartheta_{\text{min}}$	-40	°C
Max. Operating temperature ( $I_R=0$ )	$\vartheta_{\text{max}}$	+85	°C
Storage temperature	$\vartheta_{\text{Lager}}$	-40...+85	°C
Thermal resistance (case hotspot)	$R_{\text{th}}$	0,8	K/W
Climatic category DIN IEC 68/1		40/085/21	

Test voltage between terminals	$U_{\text{TT}}$	750	V dc / 2s
Test voltage between terminal/case	$U_{\text{TC}}$	2000	V ac / 10s

Life expectancy @ hot spot 60°C		100 000	h
Failure rate @ $0,5 \times U_N / 40^\circ\text{C}$ (MIL-HDBK-217F)		163	FIT

### General data

Coating	aluminium case with resin sealing Flame retardant according to UL 94V-0
Dielectric	polypropylene
Terminals	brass nickel plated, max. torque 6 Nm
Weight	approx. 3,4 kg

RoHS compliant

### Dimensions

Diameter	$\varnothing$	116,0	$\pm 1\text{ mm}$
Length	L	295,0	$\pm 2\text{ mm}$
Pitch	RM	50,0	$\pm 0,5\text{ mm}$

