

## Film Capacitor

Type: EC1000µ700d090256KF6

date: 12/12/2013 08:33:00

Part-No: 1020080

### Preliminary

#### Technical data

Nominal capacitance	$C_N$	1000 $\mu\text{F} \pm 10\%$
Nominal voltage dc	$U_{\text{NDC}}$	700 V
Surge voltage	$U_S$	1050 V
Energy	$W_N$	245 Ws
Max. AC current @ $T_{\text{case}}=30^\circ\text{C}/1\text{ kHz}$	$I_{\text{RMS}}$	60 A
Max. Peak periodic current	$\hat{I}_{\text{Periodic}}$	6160 A
Max. Pulse rise time	$\Delta U/\Delta t$	6,2 V/ $\mu\text{s}$
Dissipation factor @ 1 kHz	$\tan\delta$	$<160 \times 10^{-4}$
Series resistance @ 1 kHz	$R_{\text{ESR}}$	$<3,5\text{ m}\Omega$

Max. Power loss @  $\vartheta_{\text{hotspot}} 85^\circ\text{C} / 1\text{ kHz}$

@ $\vartheta_{\text{case}}$	I	$P_{\text{max}}$
40°C	55 A	4,9 W
50°C	49 A	3,8 W
60°C	41 A	2,7 W
70°C	32 A	1,6 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)	$R_{\text{th}}$	1,5 K/W
Climatic category DIN IEC 68/1		40/085/21

Test voltage between terminals	$U_{\text{TT}}$	1050 V dc / 2s
Test voltage between terminal/case	$U_{\text{TC}}$	2400 V ac / 10s

Life expectancy @ hot spot 60°C 100 000 h

#### General data

Coating	aluminium can with resin sealing Flame retardant according to UL 94V-0
Dielectric	polypropylene
Terminals	M6 brass nickel plated, max. torque 6 Nm
Weight	approx. 2,1 kg

RoHS compliant

#### Dimensions

Diameter	$\varnothing$	90,0	$\pm 1\text{ mm}$
Length	L	256,0	$\pm 2\text{ mm}$
Pitch	RM	32,0	$\pm 0,5\text{ mm}$

