

PPM 50-5000.0 cv6 (K)

date: 04/04/2014 13:04:00
issued by: HT
version: 1.0
04.04.2014 13:12

Part-No: 820003962

Technical data

Nominal capacitance	C_N	5000 $\mu\text{F} \pm 10\%$
Nominal voltage dc	U_{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_{RMS}	100 A
Max. Peak periodic current	$\hat{I}_{\text{Periodic}}$	26 kA
Max. Pulse rise time	$\Delta U/\Delta t$	5,2 V/ μs
Dissipation factor @ 1 kHz	$\tan\delta$	$<250 \times 10^{-4}$
Equivalent series resistance @ 10 kHz	R_{ESR}	$<1\text{ m}\Omega$

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

@ ϑ_{case}	I	P _{max}
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

@ 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}	0,8 K/W
Climatic category DIN IEC 68/1		40/085/21

Test voltage between terminals	U_{TT}	750 V dc / 2s
Test voltage between terminal/case	U_{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	$\pm 0,5\text{ mm}$

