Leclanché Capacitors
A FISCHER & TAUSCHE COMPANY

DATA SHEET
Capacitor for Power Electronics

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Technical data

Leclanché Capacitors part number : PPM 100-390.0 cv5 (K)

Nominal capacitance	C_N	390	µF ± 10 %
Nominal voltage dc	U_{NDC}	1000	V
Surge voltage	U_S	1500	V
Energy	W_N	195	Ws
Max. AC current @ T_{case}=30°C/10 kHz	I_{RMS}	80	A
Max. Peak periodic current	$\hat{I}_{Periodic}$	4900	A
Max. Pulse rise time	$\Delta U/\Delta t$	12,6	V/µs
Dissipation factor @ 1 kHz	tanδ	140	$x10^{-4}$
Series resistance @ 10 kHz	R_{ESR}	<6,2	mΩ

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

@ ϑ_{case}	I	P_{max}
40 °C	71 A	26,6 W
50 °C	62 A	20,7 W
60 °C	53 A	14,8 W
70 °C	41 A	8,9 W

U_N-Derating

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

Min. Operating temperature	ϑ_{min}	-40	°C
Max. Operating temperature (I_R =0)	ϑ_{max}	+85	°C
Storage temperature	ϑ_{Lager}	+85	°C
Thermal resistance (case hotspot)	R_{th}	1,9	K/W
Climatic category DIN IEC 68/1		40/085/21	
Test voltage between terminals	U_{TT}	1500	V dc / 2s
Test voltage between terminal/case	U_{TC}	4000	V ac / 10s
Life expectancy @ hot spot 60°C		100 000	h

General data

Coating	alu can with resin sealing Flame retardant according to UL 94V-0
Dielectric	polypropylene
Terminals	brass nickel plated, max. torque 4 Nm-
Weight	approx. 1,2 kg

RoHS compliant

Dimensions

Diameter	Ø	90	±0,5 mm
Length	L	145	+2-1 mm
Pitch1	RM1	35	±0,4 mm