Data Sheet

Film Capacitor

LCap p/n : PL-4 80-30.0 g (K)

Technical data

Nominal capacitance	C_N	30	µF ± 10 %
Nominal voltage dc	U_{NDC}	800	V
Surge voltage	U_S	1200	V
Energy	W_N	9,6	W
Max. AC current @ T_{case}=30°C/10 kHz	I_{RMS}	27	A
Max. Peak periodic current	$\hat{I}_{Periodic}$	600	A
Max. Pulse rise time	$\Delta U/\Delta t$	20	V/µs
Dissipation factor @ 1 kHz	tanδ	12	x10^{-4}
Series resistance @ 10 kHz	R_{ESR}	<5	mΩ

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

@ ϑ_{case}	I	P_{max}
40 °C	24,4 A	3,0 W
50 °C	21,7 A	2,3 W
60 °C	18,4 A	1,7 W
70 °C	14,2 A	1,0 W

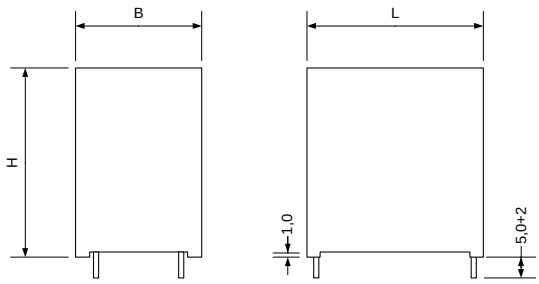
U_N-Derating

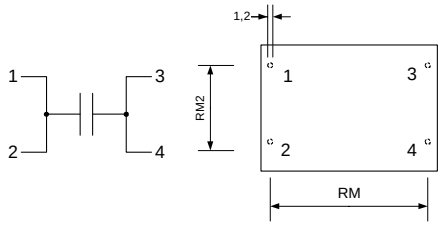
@ ϑ_{case}	U_{Nmax}
70°C	U_N x 1
75°C	U_N x 0,9
80°C	U_N x 0,8
85°C	U_N x 0,7

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}	10	K/W
Climatic category DIN IEC 68/1		40/085/21	
Test voltage between terminals	U_{TT}	1200	V dc / 2s
Life expectancy @ hot spot 60°C		100 000	h

Dimensions

Length	L	42,5	±1 mm
Width	B	30	±1 mm
Height	H	45	±1 mm
Pitch	RM	37,5	±0,4 mm
Pitch2	RM2	20,4	±0,4 mm





General data

Coating	plastic case with resin sealing Flame retardant according to UL 94V-0
Dielectric	polypropylene
Terminals	tinned copper wireØ 1,2 mm
Soldering conditions	max. 260°C / 10 sec
Weight	approx. 0,07 kg

RoHS compliant