

Preliminary

Type: FRP2x50µ630d035100K

Part-No: 1031590

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Technical data

Nominal capacitance	C_N	2x 50 µF ± 10%
Nominal voltage dc	U_{NDC}	630 V
Nominal voltage ac @ 50 Hz	U_{NAC}	100 V
Surge voltage	U_S	945 V
Energy	W_N	19,8 Ws
Max. AC current	I_{RMS}	2x 20 A
Max. Peak periodic current	$\hat{I}_{Periodic}$	2x 589 A
Max. Pulse rise time	$\Delta U / \Delta t$	11,7 V/µs
Dissipation factor @ 1 kHz	$\tan \delta$	< 50 x 10 ⁻⁴
Equivalent series resistance @ 10 kHz	R_{ESR}	2x < 20 mΩ

Dimensions

Diameter	D	35,0	± 1 mm
Length	L	100,0	± 1 mm

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

@ ϑ_{case}	I	P _{max}
40°C	2x 20 A	6,4 W
50°C	2x 18 A	5,0 W
60°C	2x 15 A	3,6 W
70°C	2x 12 A	2,1 W

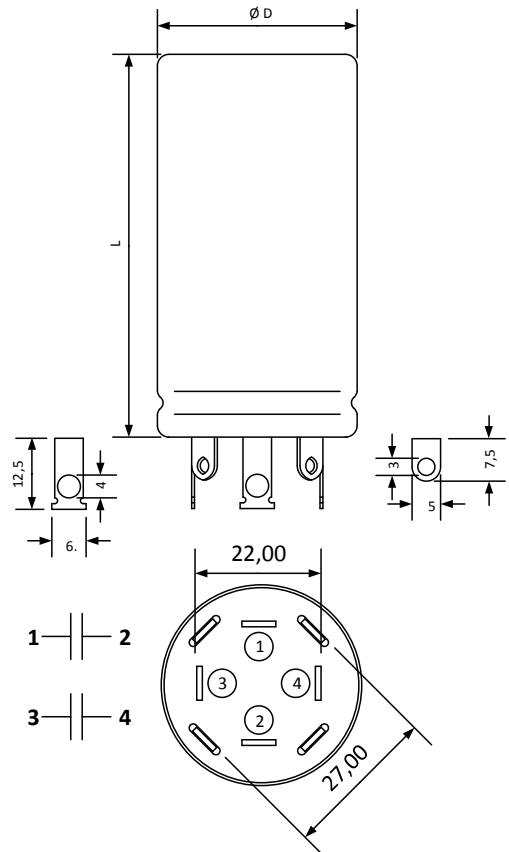
U_N -Derating

@ 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}	7,5 K/W
Climatic category DIN IEC 68/1		40/085/21

Test voltage between terminals	U_{TT}	945 V dc / 2s
Test voltage between terminal/case	U_{TC}	2260 V ac / 10s

Life expectancy @ hot spot 70°C 100 000 h



General data

Coating	Aluminium can with resin sealing Flame retardant according to UL 94V-0
Dielectric	polypropylene
Terminals	solder lugs
Soldering conditions	max. 260°C / 10 sec
Weight	approx. 130 g

RoHS compliant