

THERMAL CONDUCTIVE FILM

N35



N35 is a thermal fabric. This foil offers outstanding thermal conductivity, which is achieved by a specially filled silicone elastomer. The good electrical insulation properties are thereby retained.

On request, these films can also be supplied with fibre glass reinforcement and with or without adhesive coating.

The excellent thermal resistance of this film enables the optimum heat transfer to the heat sink.

Properties	Unit	N25	Test Method
Color	-	Pink	Visual
Thermal Properties			
Thermal resistance R_{th}	K/W	0.16	-
Thermal impedance R_{ti}	$^{\circ}\text{Cmm}^2/\text{W}$	64	ASTM D5740
Thermal conductivity λ	W/mK	3.5	ASTM D5470
	Kin^2/W	0.09	
Electrical Properties			
Breakdown voltage $U_{d;ac}$	kV	1.5	ASTM D149
Dielectric breakdown $E_{d;ac}$	kV/mm	7.0	-
Volume resistivity	Ωm	1.3×10^{14}	-
Dielectric loss factor $\tan \delta$		6.7×10^{-2}	
Dielectric constant ϵ_r		2.3	ASTM D150
Mechanical Properties			
Standard thickness	mm	0.225	
Possible thickness	mm	0.125 - 0.5	
Tensile strength	N/mm^2	1.3	ASTM D412
Hardness	Shore A	70-80	ASTM D2240
Elongation	%	25	ASTM D412
Physical Properties			
Flame rating	UL-94	V-0	-
Density	g/cm^3	1.97	-
Application temperature	$^{\circ}\text{C}$	-60 up to +250	-

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Order example:

N35-0225-A1-FG

N = Electric insulating film - 35 = 3.5 W/mK - 0225 = 0.225 mm A1= adhesive on one side, FG= with fibre