

N65

Electrical Insulating, Thermal Material

N65 is a non-silicone electrical isolating thermal interface material that delivers an exceptionally high level of thermal conductivity of 6.5W/mK. N65 is highly suited for rugged and extremely demanding applications as well as silicone sensitive applications. Its inherent softness removes micro air voids between contact surfaces at the interface. The cold-flow action of N65 mounted to a cold wall or chassis, via a spring, metal clip or clip, delivers reliable and high thermal performance whilst also guaranteeing electrical isolation



Properties	Unit	N65
Base material	-	Ceramic-filled polyurethane
Tested thickness	mm	0.2
Color		Light blue
Thermal Properties		
Thermal resistance R _{th}	K/W	0.082
Thermal impedance R _{ti}	°Cmm²/W (Kin²/W)	32.9 (0.05)
Thermal conductivity λ	W/mK	6.5
Electrical Properties		
Breakdown voltage U _{d;ac}	KV	4

Order example:

N65-20-A0

N = Electric insulating film - 65 = 6.5W/mK - 20 = 0.20mm - A0 = No adhesive on one side A0 = without adhesive / A1 = with adhesive on one side

TECHNOLOGIES

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Thermal impedance R _{ti}	°Cmm²/W (Kin²/W)	32.9 (0.05)
Thermal conductivity λ	W/mK	6.5
Electrical Properties		
Breakdown voltage U _{d;ac}	KV	4
Dielectric breakdown E _{d;ac}	KV/mm	25
Volume resistivity	Ωm	2.0 x 10 ¹¹
Dielectric loss factor tan δ	1	13.7 x 10 ⁻³
Dielectric constant ϵ_r	1	3.1
Mechanical Properties		
Tensile strength	N/mm ²	2.0
Hardness	Shore A	70 - 85
Elongation	%	150
Physical Properties		
Possible thicknesses	mm	0.1 - 0.3
Flame rating	UL94	V0
Comparative Tracking Index (3.00 mm)	600V	
Density	g/cm ³	1.46
Application temperature	°C	-40 to +125

The data presented in this leaflet are in accordance with the present state of our knowledge. All stat ments, technical information and recommendations herein are based on tests we believe to be reliable. The customer is thereby not absolved from carefully checking all supplies immediately on receipt. The recommendations made in this catalogue should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. Before using, user shall determine the suitability of the product for its intended use, and the user assumes all risks and liability whatsoever in connection there with. We reserve the right to alter product constants within the

scope of technical process or new developments. The recommendations do not absolve the customer from the obligation of investigating the possibility of infringement of third parties right and, if necessary, clarifying the position. Sellers' and manufacturer' only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable either in tort or contract for any loss or damage, direct or incidental, or consequential, including loss of profit to use a product. No statement, purchase order or recommenda to use a seller or purchaser not contained herein shall have any force or effect unless in an agreement signed by the officers of the seller