

N18 is a silicone elastomer film that is characterized by its electrical characteristics. It exhibits good thermal behavior.

N18 can be reinforced with fiber glass what leads to very good mechanical properties. These film types possesses excellent mechanical stability along with good perforation strength.

N18 has good self-adhesive properties. Additional adhesive coatings are available.

Properties	Unit	N18	Test Method
Tested thickness	mm	0.23	-
Color	-	Green	Visual
Thermal Properties			
Thermal resistance R_{th}	K/W	0.35	-
Thermal impedance R_{ti}	$^{\circ}\text{Cmm}^2/\text{W}$	125	ASTM D5740
Thermal conductivity λ	W/mK	1.8	ASTM D5470
Electrical Properties			
Breakdown voltage $U_{d;ac}$	kV	8	ASTM D149
Dielectric breakdown $E_{d;ac}$	kV/mm	26	-
Volume resistivity	Ωm	2.5×10^{11}	-
Dielectric constant ϵ_r	1	2.9	ASTM D150
Mechanical Properties			
Tensile strength	N/mm ²	3	ASTM D412
Hardness	Shore A	65-70	ASTM D2240
Elongation	%	75	ASTM D412
Physical Properties			
Standard thicknesses	mm	0.25	-
Flame rating	UL94	V0	-
Density	g/cm ³	2.29	-
Application temperature	$^{\circ}\text{C}$	-60 up to +250	-

Ordering example:

N18-025A0

N = Nulla / 18 = 1.8W/mK / 025 = 0.25mm

A0 = without adhesive / A1 = with adhesive on one side

01/18

Information furnished by Thal Technologies regarding technical data is believed to be accurate and reliable but our customers bear the responsibility in assessing fitness for purpose. Thal Technologies makes no warranties as to the fitness, merchantability or suitability of any materials or products for any uses. Thal Technologies shall not be liable for damages of any kind. N18-V1