

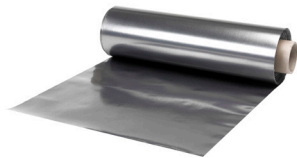
# N-G 0.125 TO 0.5MM A0/A1 – NATURAL GRAPHITE



## DATASHEET

### FEATURES

- High efficiency heat transfer: Thermal conductivity 300W/mK: Flexible diaphragm, conversion into any shape (minimum hole size 1.0mm diameter).
- Light weight: density is 1.5-2.1g/cm<sup>3</sup> (between 1/3-3/4 of aluminum and equivalent to 1/5-1/4 of copper).
- Low resistance: can be used for electromagnetic shielding.
- Adhesive option available applications.



### APPLICATIONS

- Communication equipment and peripheral equipment;
- Computers, Tablet Computers, Smart phones, Intelligent terminals, High power LED applications etc.

PROPERTIES	TEST METHOD	UNIT	N - G SERIES
Material	-	-	Natural Graphite
Colour	Visual	-	Dark Grey
Thickness (±10%)	-	mm	0.125/0.25/0.5
Thermal Conductivity (X-Y axis)	ASTM-D5470	W/mK	300
Thermal Conductivity (Z axis)	-	-	5.0
Hardness (± 5)	ASTM-D2240	Shore A	80
Density	ASTM-D792	g/cm <sup>3</sup>	1.8
Specific Heat Capacity (50°C)	-	J/kg.K	0.82
Working Temperature	-	°C	-40 - 400
Tensile Strength	ASTM-D412-1998A	Mpa	4.9

### THERMAL IMPEDANCE (0.27MM)

Pressure (psi)	10	20	30	40	50	60
Thickness (mm)	0.27	0.26	0.24	0.23	0.22	0.22
Compression Ration (%)	0	5.2	10.4	14	17.4	19.6
Thermal Impedance (°C-in <sup>2</sup> /W)	0.29	0.23	0.19	0.17	0.15	0.14

### NOTES

- Customised shapes are available
- The above performance data is tested in an environment of 70% humidity, temperature 25 °C
- This data is intended for reference purposes only. It is recommended that the material is tested to fully evaluate its performance ensuring it is fit for purpose.

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