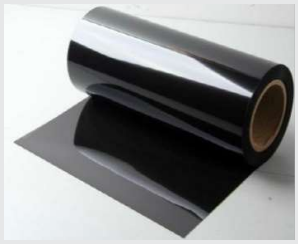
Distributed in Europe by:

# N-G 0.125 to 0.5mm A0/A1 – Natural Graphite

DATASHEET



N-G 0.125 to 0.5mm A0/A1
Natural Graphite

## 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$^3$ (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

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

| PROPERTIES | TOLERANCE | UNIT | NATURAL GRAPHITE (A0) |
|---|---|---|---|
| Thickness | ±10% | mm<br>inch | 0.125 to 0.500<br>0.005 to 0.020 |
| Thermal Conductivity (X, Y axis) | - | W/mK | 300 |
| Thermal Conductivity (Z axis) | - | W/mK | 5 |
| Thermal Diffusion | - | m$^2$/s | 2.04 |
| Hardness | ±10% | Shore A | 80 |
| Density | - | g/cm$^3$ | 1.8 |
| Specific Heat Capacity (50 ˚C) | - | J/kg.K | 0.82 |
| Working Temperature | - | ˚C | -40 to 400 |
| Bend Test (R5/180˚) | - | times | >1000 |
| Tensile Strength | - | MPa | 4.9 |
| Environmental Suitability | - | - | Halogen Free<br>ROHS/REACH |
| Flammability Rating | - | UL94 | UL94 V0 |

Note:
1. Customised shapes are available;
2. The above performance data is tested in an environment of 70% humidity, temperature 25℃.
3. 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.
4. Use of an adhesive (A1) may affect thermal conductivity stated above.

**Ventec International Group**

**United Kingdom**
Unit 1 Trojan Business Centre,
Tachbrook Park Estate
Leamington Spa, CV34 6RH
Tel: +44 1926-889822

**Germany**
Morschheimerstrasse 15
67292 Kirchheimbolanden
Tel: +49 6352-753260

emithermal@ventec-europe.com
www.venteclaminates.com

Published:
16/07/2019