

HIGH THERMAL CONDUCTIVITY

N045



N045 is an electronically isolating phase change thermal interface material suitable for use between a heat sink and a variety of heat dissipating components.

N045 can be supplied in die-cut shapes for use in a wide range of electronic applications.

N045 is available in 0.025mm and 0.051mm.

| Properties | Unit | N045 | Test Method |
|----------------------------------|-----------------------------|----------------------|-------------|
| Tested thickness | mm | 0.225 | - |
| Color | - | Yellow | Visual |
| Thermal Properties | | | |
| Thermal resistance R_{th} | K/W | 0.32 | - |
| Thermal impedance R_{ti} | Kcm ² /W @ 69KPa | 2.90 | 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 | Ω m | 2.5×10^{11} | - |
| Dielectric constant ϵ_r | 1 | 2.9 | ASTM D150 |
| Mechanical Properties | | | |
| Tensile strength | N/mm ² | 2 | ASTM D412 |
| Hardness | Shore A | 65-70 | ASTM D2240 |
| Elongation | % | 75 | ASTM D412 |
| Physical Properties | | | |
| Standard thicknesses | mm | 0.025 / 0.051 | - |
| Flame rating | UL94 | V0 | - |
| Density | g/cm ³ | 2.29 | - |
| Application temperature | °C | -60 up to +250 | - |

12/17

Ordering example:

N045-51A0

N = Nulla / 045 = 0.45W/mK / 51 = 0.051mm

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