UniGraph 9000

Graphite Thermal Interface Material

UniGraph 9000 delivers excellent thermal performance and heat spreading characteristics. It is ideal for thermally coupling to heat sinks.

UniGraph 9000 is graphite based and designed to thermally connect metal to metal surfaces that require no electrical isolation. **UniGraph 9000** will deliver consistent and repeatable thermal performance unlike grease. This provides a known and repeatable level of thermal conductivity which the application of grease is difficult to control.

Features

- Non-electrically isolating graphite thermal interface material
- Soft surfaces on both sides of the material work to reduce interfacial thermal resistance
- Excellent, no mess, alternative to thermal grease

Benefits

- Consistent and repeatable thermal performance
- Cost effective thermal solution for a wide variety of applications that require no electrical isolation
- Easy to handle and apply
- Replaces messy to apply grease with no pump out or risk of drying out

Availability

- Standard thicknesses of 0.02 / 0.04 / 0.07 and 0.10 mm
- Available as custom die-cut shapes and standard sizes of 150mm x 500mm Rolls 150mm x50m
- Can be supplied with an additional adhesive coating applied on one side

Recommended Uses

- Thermally coupling metal backed PCBs to heatsinks. cold walls or nearby metal work
- Mounting an LED lighting module to a heatsink
- Automotive, power supply, motor drive and in applications where costs need to be kept to a minimum

Typical Physical Properties

Property (unit)	Test Method	UniGraph 9000 (0.04mm)
Colour	Visual	Black
Thermal Conductivity – Along Material (W/mK)	ASTM D5470	1500
Thermal Conductivity – Through Material (W/mK)	ASTM D5470	9.5
Electrical Conductivity S/cm	ASTM E1269	30000
Operating Temp. (°C)	-	-220 to +300

Mechanical Information

Property (unit)	Test Method	UniGraph 9000 (0.04mm)
Tensile Strength (MPa)	ASTM F152	25
Hardness (Shore A)	ASTM D2240	50
Outgassing CVCM (%)	ASTM E595	0.10
Density (g/cc)	-	1.8
Volume Resistivity (Ω-cm)	ASTM D257	11 x 10^{-5}

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www.universal-science.com

UK +44 (0) 1908 222 211

IT +39 (02) 395 613 61 FR +33 (0) 1602 00276

This material is often used in these industries:

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