

DATASHEET

GTS Series

High Performance Graphite

The GTS series graphite can be used in many applications requiring high thermal conductivity and extended temperature ranges. Graphite has excellent heat spreading qualities and is offered in a variety of thicknesses. GTS graphite can be die-cut or laminated with adhesives or other materials.

| Properties | | GTS-1000 | GTS-500 | GTS-250 | GTS-100 | GTS-25 | GTS-12 |
|---|-------------------------------------|----------------|-----------------|-----------------|-------------------|-------------------|-------------------|
| Thickness | mm | 1.0 | .5 | .25 | .125 | .025 | .012 |
| Thermal Conductivity <i>Through Plane-In Plane</i> | W/m-K | 3-5 300-400 | 6-10 300-500 | 6-10 300-500 | 7-12 1000-1800 | 7-12 1000-1800 | 7-12 1000-1800 |
| Bulk Density | mm | 1.0-1.2 | 1.2-1.4 | 1.4-1.5 | 1.5-1.6 | | |
| Carbon Content | | 99 - 99.5% | | | 99.5 - 99.9% | | |
| Hardness | Shore | 85 | | | | | |
| CTE <i>In Plane-Through Plane</i> | $10^{-6}\text{m/m}^{\circ}\text{C}$ | -0.4 to 27.0 | | | | | |
| Operating Temperature | $^{\circ}\text{C}$ | -40 to +400 | | | | | |
| Specific Heat @25°C | J/kg-°C | 710 | | | | | |

Note: This material is electrically conductive.

See second page for Available Sizes and Adhesive Options

DISCLAIMER: Purchaser shall be solely responsible for determining the adequacy of the product for any and all uses which the purchaser shall apply the product, and the application of the product by the purchaser shall not be subject to any implied warranty of fitness for that purpose.



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GTS Series Graphite GTS Series Adhesive Options

| GTS Series Grade | Maximum Available Size |
|------------------|-------------------------------------|
| GTS-1000 | 500 mm x 500 mm (sheets) |
| GTS-500 | 0.5 mm x 450 mm x 1,000 m (rolls) |
| GTS-250 | 0.25 mm x 450 mm x 1,000 m (rolls) |
| GTS-100 | 0.125 mm x 450 mm x 1,000 m (rolls) |
| GTS-25 | 0.025 mm x 450 mm x 1,000 m (rolls) |
| GTS-12 | 0.012 mm x 450 mm x 1,000 m (rolls) |

| Properties | Adhesive Options | | | |
|--|--|-------------|----------|-------|
| | GA1 | GP1A1 | GP8A8 | |
| Description | Acrylic | PET Film | PET Film | |
| Coating Thickness | mm | 0.013 | 0.038 | 0.012 |
| Release Liner Thickness | mm | 0.08 | 0.08 | 0.08 |
| Release Liner Type | Paper | Paper | Paper | |
| Dielectric Strength | V | - | 2,800 | 900 |
| Operating Temperature | °C | -40 to +180 | | |
| Thermal Contact Impedance | °C-cm ² /W <i>per side</i> | 0.16 | - | 0.42 |
| Thermal Conductivity Through Thickness | W/m-K | - | 0.16 | 0.16 |

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