

ThermaCool®

Thermal Interface Materials

ThermaCool® C690 Series

Thermally Conductive Graphite Tape

ThermaCool® C690 Series is comprised of flexible graphite film, coated on one side with 0.025mm thick thermally conductive acrylic pressure-sensitive adhesive.

Features/Benefits

- Graphite film spreads heat evenly to allow for maximum heat sink potential at low pressures
- Soft graphite material conforms readily to surface imperfections to improve thermal transfer
- One-sided adhesive construction allows for easy rework, replacement, or upgrade of components
- Pressure-sensitive adhesive tape can be pre-applied to a heat sink to minimize assembly costs

Typical Properties

Property	C695	C6910	Test Method
Colour	Metallic Black	Metallic Black	—
Thickness mm (mils)	0.152 (6.0)	0.279 (11.0)	ASTM D1000
Tensile Strength MPa (psi)	3.45 (500)	3.45 (500)	ASTM D1000
Thermal Conductivity W/m ⁻¹ K ⁻¹	4.0	2.4 with adhesive 5.0 uncoated	ASTM E1530
Thermal Impedance @ 10 psi °C in. ² /W	0.10	0.10	ASTM E1530
Operating Temperature °C	-29 to +149	-29 to +149	—
Adhesion to Aluminum N/cm (oz./in.)	3.3 (30)	3.3 (30)	ASTM D1000
Adhesion to Liner N/cm (oz./in.)	0.9 (8)	0.9 (8)	ASTM D1000

Applications

- Bonding components to heat sinks where electrical isolation is not a concern
- Creating electrically conductive surface on electrically isolating materials
- Heat spreading capabilities make C690 tapes ideal for bonding multiple components to a single heat sink

Availability—Available in slit-rolls up to 610mm wide.

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