

C690 Series

Thermally Conductive Graphite Tape

Saint-Gobain Performance Plastics **ThermaCool® C690 Series** are comprised of flexible graphite film coated on one side with 1 mil thickness of thermally conductive acrylic pressure-sensitive adhesive.

Physical Properties

Property	Test Method	C695	C6910
Color	Visual	Metallic Black	Metallic Black
Thickness (mils)	ASTM D1000	6.0	11.0
Thermal Conductivity (W/mK) Through Thickness	ASTM E1530 @ 100 psi/100°C	2.0	2.6
Thermal Conductivity (W/mK) X-Y Plane	Angstrom's Method*	140	140
Thermal Impedance (°C in ² /W)	ASTM E1530 @ 100 psi/100°C	0.12	0.16
Tensile Strength (psi)	ASTM D1000	500	500
Dielectric Strength	ASTM D1000	N/A	N/A
Volume Resistivity	ASTM D257	N/A	N/A
Adhesion to Aluminum (oz./in.)	ASTM D1000	30	30
Adhesion to Liner (oz./in.)	ASTM D1000	8	8
Operating Temperature Range (°F)	—	-20 to 300	-20 to 300

All properties are typical values and should not be used for writing specifications.

*Vendor supplied data

Recommended Uses

One-sided adhesive allows for easy rework and upgrades. The heat spreading capabilities make it ideal for use with multiple components using one heat sink.

Availability

Available in slit-rolls up to 24".

Limited Warranty: For a period of 6 months from the date of first sale, Saint-Gobain Performance Plastics Corporation warrants this product(s) to be free from defects in manufacturing. Our only obligation will be to provide replacement product for any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risks, if any, including the risk of injury, loss or damage, whether direct or consequential, arising out of the use, misuse, or inability to use this product(s). SAINT-GOBAIN PERFORMANCE PLASTICS DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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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

Applications

- Bonding components to heat sinks where electrical isolation is not a concern
- Creating electrically conductive surface on electrically isolating materials

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