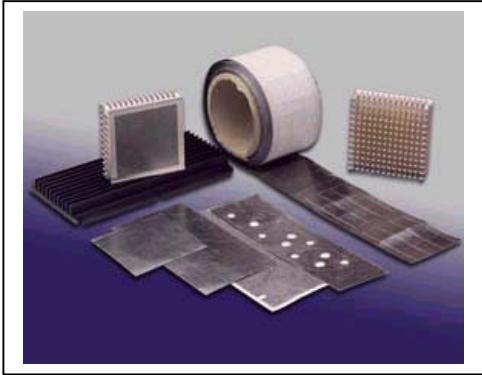


eGRAF™ HiTherm™ Electronic Thermal Management Products

eGraf™ HiTherm™ Thermal Interface Materials are designed for use in applications requiring low contact resistance and high thermal conductivity at low clamping loads.



HiTherm materials are manufactured from natural graphite and a polymer additive. The addition of this polymer additive to highly conductive natural graphite minimizes the thermal resistance at low contact pressures.

As shown in the graph on the right, the thermal resistance of HiTherm .005 is considerably less than that of eGraf 1205, especially at low contact pressures.

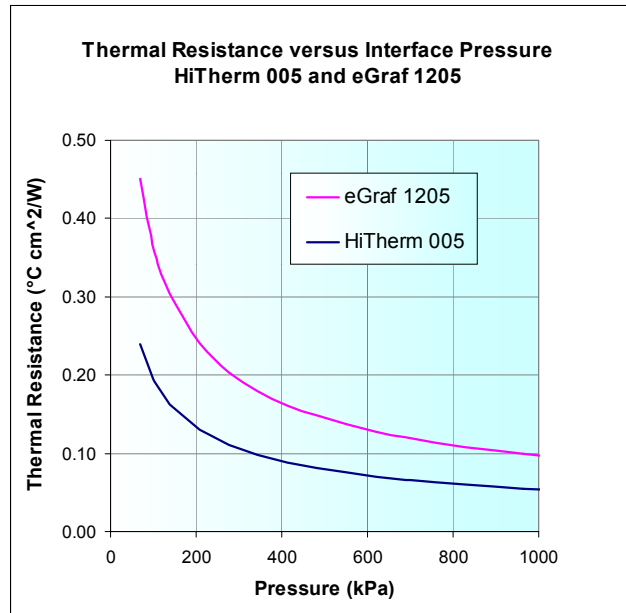
HiTherm materials are an excellent replacement for thermal grease or phase change materials. HiTherm will not separate, dry out or pump out. Excellent contact is maintained for the life of the assembly.

Typical applications include DC to DC converters, CPU modules microprocessors, and hot and cold plates.

All HiTherm materials are available with or without a pressure sensitive adhesive (PSA), in sheet, roll or die cut form. HiTherm can be easily cut to any size or shape.

Typical Properties of HiTherm Materials

Property	HiTherm 005	Test Method
<i>Physical</i>		
Color	Dark Grey	
Thickness	0.13 mm	
Tensile Strength	1400 kPa	ASTM F-152
<i>Thermal</i>		
Operating Temperature	-40 to 150 °C	
Thermal Impedance @100 kPa	0.19 cm ² °C/W	ASTM D 5470 Modified
Thermal Impedance @700 kPa	0.07 cm ² °C/W	ASTM D 5470 Modified
Thermal Conductivity Thru-thickness	16 W/m•K	ASTM D 5470 Modified
In-plane	120 W/m•K	Angstrom's Method
<i>Electrical - typical values</i>		
Electrical Resistivity Thru-thickness	>100 µohm m	ASTM C611
In-plane	10 µohm m	ASTM C611
<i>Note: Dielectric coatings can be applied to HiTherm to increase Thru-thickness Electrical Resistivity</i>		



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