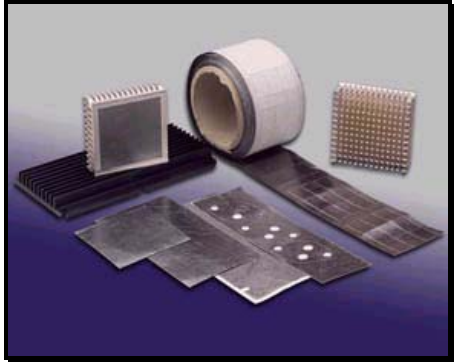


eGraf™ HiTherm™ Thermal Interface Materials are designed for use in applications requiring low contact resistance and high thermal conductivity at low clamping loads.



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.

The graph on the right shows the thermal resistance of HiTherm 005 and HiTherm 010 as a function of contact pressure.

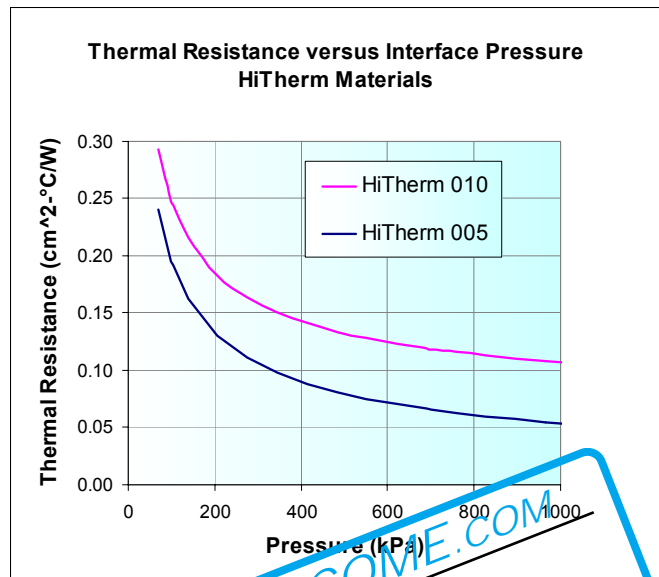
HiTherm materials are an excellent replacement for thermal grease or phase change materials. HiTherm will not separate, dry out or pump out. Excellent contact is maintained for the life of the assembly.

Typical applications include DC to DC converters, microprocessors, CPU modules, 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 (see TB 255 for additional information).

Typical Properties of HiTherm Materials

Property	HiTherm 005	HiTherm 010	Test Method
<i>Physical</i>			
Color	Dark Grey	Dark Grey	
Thickness	0.13 mm	0.25 mm	
Thickness Tolerance	±0.013 mm	±0.013 mm	
Maximum Roll Width	30.0 cm	30.0 cm	
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94
Tensile Strength	1400 kPa	1780 kPa	ASTM F-152
<i>Thermal</i>			
Operating Temperature	-35 to 125 °C	-35 to 125 °C	
Thermal Impedance @100 kPa	0.19 cm ² °C/W	0.25 cm ² °C/W	ASTM D 5470 Modified
Thermal Impedance @700 kPa	0.07 cm ² °C/W	0.12 cm ² °C/W	ASTM D 5470 Modified
Thermal Conductivity			
Thru-thickness	16 W/mK	16 W/mK	ASTM D 5470 Modified
In-plane	120 W/mK	120 W/mK	Angstrom's Method
<i>Electrical - typical</i>			
Electrical Resistivity			
Thru-thickness	>100 μΩm	>100 μΩm	ASTM C611
In-plane	10 μΩm	10 μΩm	ASTM C611



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