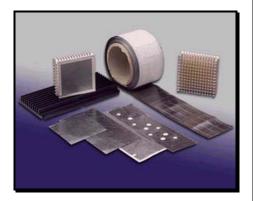


eGraf[™] HiTherm[™]A Thermal Interface Materials with adhesive coatings are designed for use in applications requiring low contact resistance, high thermal conductivity at low clamping loads and ease of application.



HiTherm A materials are manufactured from natural graphite and a polymer additive. A Pressure Sensitive Adhesive is applied one surface to adhere the HiTherm pad to heat sinks, spreaders etc.

HiTherm A 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.

The graph on the right shows the thermal resistance of HiTherm A as a function of contact pressure. The adhesive coating slightly increases the thermal resistance of the HiTherm material. If this is objectionable, an alternative is HiTherm ES Edge Seal material (see bulletin TB 276E for additional information).

All HiTherm A materials are available in sheet, roll or die cut form. HiTherm A

Typical Properties of HiTherm A Materials with Pressure Sensitive Adhesive Coatings

Property	HiTherm 005	HiTherm 010	Test Method
<u>Physical</u>			
Color	Dark Grey	Dark Grey	
Thickness	0.13 mm	0.25 mm	
Thickness Tolerance	±0.013 mm	±0.013 mm	
Adhesive Thickness	4 micron	4 micron	
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
<u>Thermal</u>			
Operating Temperature	-35 to 125 °C	-35 to 125 °C	
Thermal Impedance @100 kPa	0.35 cm ² °C/W	0.41 cm ² °C/W	ASTM D 5470 Modified
Thermal Impedance @700 kPa	0.23 cm ² °C/W	0.28 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	Angstom's Method
<u>Electrical - typical</u>			
Electrical Resistivity			
Thru-thickness	>100 μΩm	>100 μΩm	ASTM C611
In-plane	10 μΩm	10 μΩm	ASTM C611

