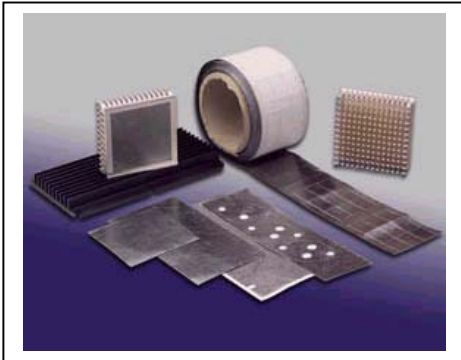


eGRAF™ 700 Electronic Thermal Management Products

The eGraf™ 700 class of Thermal Interface Materials are designed for use in applications requiring low contact resistance and high thermal conductivity.



eGraf 700 materials are manufactured entirely from natural graphite with no fillers or binders. eGraf 700 will not dry out and no outgassing occurs under vacuum conditions. eGraf 700 materials are useable at temperatures up to 400°C.

eGraf 700 materials have a higher Thermal Conductivity In-plane than eGraf 1200 materials. This makes them more suitable for heat spreading applications. eGraf 700 materials are available in thickness ranging from 0.08 mm to 1.5 mm.

The graph on the right shows the thermal resistance of eGraf 700 materials as a function of contact pressure.

Typical applications include heat spreaders, chip burn-in and chip testing fixtures, DC to DC converters, and hot and cold plates.

All eGraf 700 materials are available with or without a pressure sensitive adhesive (PSA), in sheet, roll or die cut form. eGraf 700 can be easily cut to any size or shape.

This information is not to be taken as a warranty of representation for which we will assume legal responsibility nor permission or recommendation to practice any patented invention without license. It is offered solely for your consideration, investigation and verification. eGraf is a trademark of Graftech Inc. Phone 1-800-253-8003, In Ohio, 1-216-529-3777 FAX 1-216-529-3922

Typical Properties of eGraf 700 Materials

Property	eGraf 703	eGraf 705	eGraf 710	Test Method
<i>Physical</i>				
Color	Dark Grey	Dark Grey	Dark Grey	
Thickness	0.08 mm	0.13 mm	0.25 mm	
Tensile Strength	4000 kPa	4700 kPa	4700 kPa	ASTM F-152
<i>Thermal</i>				
Operating Temperature	-40 to 400 °C	-40 to 400 °C	-40 to 400 °C	
Thermal Impedance @100 kPa	0.48 cm ² °C/W	0.45 cm ² °C/W	0.85 cm ² °C/W	ASTM D 5470 Modified
Thermal Impedance @700 kPa	0.24 cm ² °C/W	0.24 cm ² °C/W	0.37 cm ² °C/W	ASTM D 5470 Modified
Thermal Conductivity				
Thru-thickness	6 W/m•K	6 W/m•K	6 W/m•K	ASTM D 5470 Modified
In-plane	240 W/m•K	240 W/m•K	240 W/m•K	Angstrom's Method
<i>Electrical - typical</i>				
Electrical Resistivity				
Thru-thickness	>100 µohm m	>100 µohm m	>100 µohm m	ASTM C611
In-plane	10 µohm m	10 µohm m	10 µohm m	ASTM C611
<i>Note: Dielectric coatings can be applied to eGraf 1200 materials to increase Thru-thickness Electrical Resistivity</i>				

