

Product Family - HITHERM™ C3200

Product Overview

HITHERM™ HT-C3200 thermal interface materials are designed for use in applications requiring large surface, high contact pressure, high performance, low contact resistance and high thermal conductivity. The flexible graphite materials can be die-cut to ensure exact fit while the compressibility of the material improves surface contact for high in-plane thermal conductivity and compensates for up to 125 μ of flatness (No thickness recovery after compression).

HITHERM™ HT-C3200 is at this moment the only available alternative to indium interface.

Applications

Power modules such as IGBT, RF devices used in:

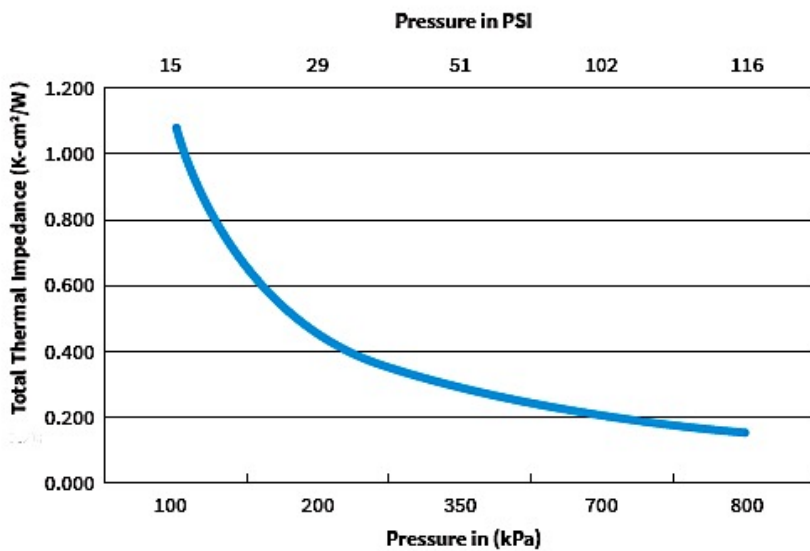
- UPS and inverters
- Motor drives
- Base stations / Telecommunication
- Power supply modules, rectifiers and chargers
- Thermo Electric Devices
- High performance computers and servers
- EV /HEV / PHEV



Hitherm™ HT-C3200 Graphite Thermal Interface Data Sheet

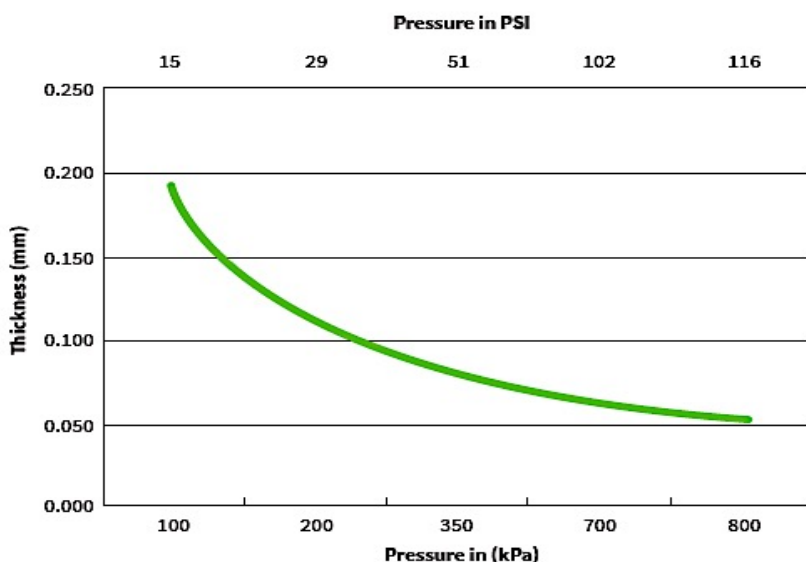
Typical Starting Thickness (mm)	0.200 ± 20
Compressible (%) - No Thickness Recovery After Compression	70
Thermal Conductivity In-Plane X-Y (W/m-K) @ 700kPa	800
Thermal Conductivity Through-Plane Z (W/m-K) @ 700kPa	7
Thermal Impedance @ 200kPa (K-cm ² /W)	0.49
Thermal Impedance @ 700kPa (K-cm ² /W)	0.18
Electrical Conductivity Through-Plane Z (S/cm)	5 • 19,000
Coefficient of Thermal Expansion In-Plane X-Y (ppm/°C)	27 • - 0.4
UL Flammability Rating	94V-O
Operating Temperature (°C)	-40 to +400
Specific Heat (J/gC) @ 25 °C	0.8
RoHS Compliant	Yes
Lead/Halogen Free	Yes

THERMAL IMPEDANCE VS. INTERFACE PRESSURE



Thermal impedance reduces significantly with pressure, ensuring excellent performance in pressure ranges common for most standard modules and power electronic devices per manufacturer's application guide.

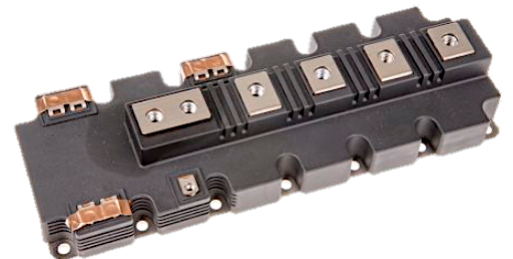
THICKNESS UNDER COMPRESSION



Material compressibility improves contact between the mating surfaces, adjusting for flatness and roughness variations, ensuring reliable performance.

Hitherm™ HT-C3200 Used In Power Electronics IGBT Modules

Manufacturer	Module	Part Numbers
Fuji Electric	62mm	G10118
	Dual XT	G10020
	PrimePack™ 2	G10019
	PrimePack™ 3	G10018
Infineon	62mm	G10118
	EconoDUAL™ 3	G10020
	EconoDUAL™ 4	G10121
	PrimePack 2	G10019
	PrimePack 3	G10018
Semikron	SEMIPACK	G10118
	SEMITRANS 3	G10118
	SEMITRANS 4	G10118
	SEMITRANS 5	G10118
	SEMiX 3p/3s	G10020
	SEMiX 5	G10121
Various	SOT-227	TBA



Asia authorized distributor: Everjoy Industrial Supplies Pte. Ltd.

Telephone: +65 6748 3093 Fax: +65 6748 7202 Email: salesmgnt@everjoy.com.sg