

Graphite interface materials are made from pure graphite and are not electrically insulating. They combine high thermal conductivity with very low thermal contact resistance. The graphite structure's thermal conductivity in the X-Y direction (in-plane direction) and Z direction (through direction) is anisotropic.

These interface materials are ideal for heat dissipation away from hot spots. Due to their natural softness, they adapt perfectly to the contact surfaces even under little pressure, expelling air pockets and greatly reducing thermal contact resistance (and consequently, total thermal transfer resistance).

- Excellent thermal conductivity
- Very low heat transfer resistance
- Good compression set
- Excellent processability
- Effectively replace thermal pastes



RoHS



REACH



PRODUCT SPECIFICATIONS

PROPERTY	VALUE / TOLERANCE			TEST METHOD
Construction & composition	Flexible graphite			-
Thickness (T)	0,13 mm (+ 0,02 mm PSA)*	0,25 mm (+ 0,02 mm PSA)*	0,50 mm (+ 0,02 mm PSA)*	-
Thickness tolerance	± 0,025			
Density	2,20 g/cm ³			Helium Pycnometer
Hardness	85 Shore A			ASTM D2240
Tensile strength	4,48 MPa			ASTM D412
Outgassing TML	0,15 %			ASTM E595
Outgassing CVCM	0,09 %			ASTM E595
Working temperature	-240 – 300 °C			-
Thermal conductivity - Z Axis	5 W/m*K			ASTM D5470 (modified)
Thermal conductivity - XY Axis	240 W/m*K			ASTM D5470 (modified)
Volume resistivity (In-Plane)	11x10 ⁵ Ω-cm			ASTM D257
Thermal resistance @ 100 psi	0,07 °C-inch ² /W	0,10 °C-inch ² /W	0,17 °C-inch ² /W	ASTM D5470 (modified)
Thermal resistance @ 681 Kpa	0,42 °C-cm ² /W	0,66 °C-cm ² /W	1,07 °C-cm ² /W	

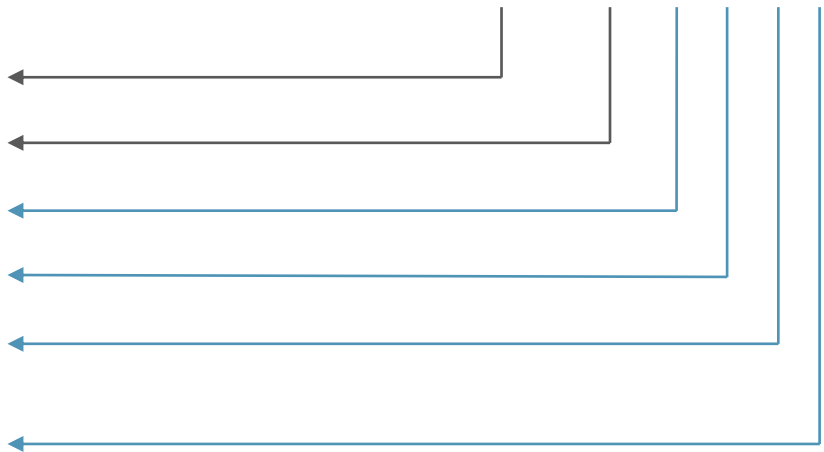
* The sensitive adhesive on one side coating is thinnest available (0,02 mm), minimizing any impact on thermal performance.

Picture only shows an example of graphite foils.

BUILDING AN ITEM NUMBER

TCGR-240-LxWxT-X

Thermally Conductive Graphite Foils	
Thermal conductivity	
xx	Length (mm)
xx	Width (mm)
xx	Thickness (mm)
PSA	With PSA (one side adhesive tape)
	Without adhesive tape



Standard options

EXAMPLE

TCGR-240-100x90x0,13-PSA

Thermally conductive graphite foil, thermal conductivity: 240 W/m*K; length: 100 mm, width: 90 mm; thickness: 0,13 mm; with adhesive tape