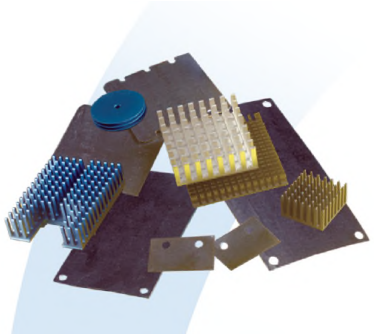
Tgon™ 800 Series
Electrically and Thermally Conductive Interface Pad



PRODUCT DESCRIPTION

Used where electrical isolation is not required, Tgon 800 is ideal for where electrical contact and thermal transfer are desired. Its unique grain-oriented, plate-like structure provides a high thermal conductivity of 240 W/mK in the XY plane and 5 W/mK through the z-axis. Tgon 800 can be supplied in 12” x 18” (305mm x 457mm) or 18” x 24” (457mm x 610mm) sheets, rolls or die-cut to specific configurations. It is also available with proprietary pressure sensitive adhesive on one side. This adhesive coating is the thinnest available, minimizing any impact on thermal performance.

FEATURES AND BENEFITS

- High thermal conductivity of 5 W/mK in Z axis and 240 W/mK in the X-Y axis
- >98% graphite
- Low thermal resistance
- Thicknesses of 0.005”, 0.010” and 0.020” (0.125mm, 0.25mm, and 0.50mm)

APPLICATIONS

- Power conversion equipment
- Power supplies
- Large telecommunications switching hardware
- Notebook computers
- Where electrical grounding is required with good thermal conductivity

AVAILABILITY

STANDARD THICKNESSES

- 0.005” (0.13mm), 0.010” (0.25mm), 0.020” (0.51mm)

STANDARD SHEET SIZE

- 12” x 18” (304.8mm x 457mm) or 18” x 24” (457mm x 609.6mm) sheets
- Tgon™ 800 sheets are supplied with no liners when ordered without adhesive.
- With adhesive, they are supplied with no top liner and white release liner on the bottom.
- Tgon™ 800 is available on rolls and individual die cut shapes.

PRESSURE SENSITIVE ADHESIVE

- Request no adhesive with “AO” suffix.
- Request adhesive on one side with “A1” suffix.
- Adhesive is provided on the material to aid in the assembly process, the adhesive is not a structural adhesive meant to bond two surfaces

Tgon™ 800 Series
Electrically and Thermally Conductive Interface Pad

TYPICAL SPECIFICATIONS

	Tgon 805	Tgon 810	Tgon 820	Test Metho
Construction	Flexible Graphite	Flexible Graphite	Flexible Graphite	N/A
Color	Pewter	Pewter	Pewter	Visual
Thickness	0.005" (0.13mm)	0.010" (0.25mm)	0.020" (0.51mm)	N/A
Thickness Tolerance	0.001" (0.025mm)	0.001" (0.025mm)	0.002" (0.05mm)	N/A
Density (g/cc)	2.20 g/cc	2.20 g/cc	2.20 g/cc	Helium Pycnor
Hardness	85 Shore A	85 Shore A	85 Shore A	ASTM D2240
Tensile Strength	650 psi	650 psi	650 psi	ASTM D412
Outgassing TML (weight %)	0.15%	0.15%	0.15%	ASTM E595
Outgassing CVCM (weight %)	0.09%	0.09%	0.09%	ASTM E595
UL Flammability Rating	V0	V0	V0	UL 94
Temperature Range*	-240°C - 300°C	-240°C - 300°C	-240°C - 300°C	N/A
Thermal Conductivity (Z Axis)	5 W/mk	5 W/mk	5 W/mk	ASTM D5470 (modified)
Thermal Conductivity (XY Axis)	240 W/mk	240 W/mk	240 W/mk	ASTM D5470 (modified)
Thermal Resistance @ 100 psi	0.07 °C-in²/W	0.10 °C-in²/W	0.17 °C-in²/W	ASTM D5470 (modified)
Thermal Resistance @ 681 kPa	0.42 °C-cm²/W	0.66 °C-cm²/W	1.07 °C-cm²/W	ASTM D5470 (modified)
Volume Resistivity (In-Plane)	11 x 10^{-5} ohm-cm	11 x 10^{-5} ohm-cm	11 x 10^{-5} ohm-cm	ASTM D257

* If adhesive is applied, the temperature range is 0°C - 120°C