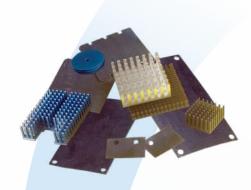


## **Tgon™ 800 Series**Electrically and Thermally Conductive Interface Pad



## HIGH-PERFORMANCE, COST EFFECTIVE THERMAL INTERFACE MATERIAL

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**

- 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

global solutions: local support ™

Americas: +1.888.246.9050 Europe: +49.0.8031.2460.0 Asia: +86.755.2714.1166

CLV-customerservice@lairdtech.com www.lairdtech.com/thermal



# Tgon<sup>™</sup> 800 Series Electrically and Thermally Conductive Interface Pad

## **TGON™ 800 TYPICAL PROPERTIES**

	TGON™ 805	TGON™ 810	TGON™ 820	TEST METHOD
Construction & Composition	Flexible Graphite	Flexible Graphite	Flexible Graphite	
Color	Pewter	Pewter	Pewter	Visual
Thickness	0.005" (0.13mm)	0.010" (0.25mm)	0.020" (0.51mm)	
Thickness Tolerance	± 0.001" (± 0.025mm)	± 0.001" (± 0.025mm)	± 0.002" (± 0.05mm)	
Density	2.20 g/cc	2.20 g/cc	2.20 g/cc	Helium Pycnometer
Hardness	85 Shore A	85 Shore A	85 Shore A	ASTM D2240
Tensile strength	650 psi	650 psi	650 psi	ASTM D412
Outgassing TML	0.15%	0.15%	0.15%	ASTM E595
Outgassing CVCM	0.09%	0.09%	0.09%	ASTM E595
UL Flammability rating	94 VO	94 VO	94 VO	
Temperature range	-240°C to 300°C	-240°C to 300°C	-240°C to 300°C	
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 <sup>-5</sup> ohm-cm	11 x 10 <sup>-5</sup> ohm-cm	11 x 10 <sup>-5</sup> ohm-cm	ASTM D257

## **STANDARD THICKNESSES**

0.005" (0.13mm), 0.010" (0.25mm), 0.020" (0.51mm) Consult the factory for alternate thicknesses.

## **STANDARD SHEET SIZE**

 $18" \times 24"$  (457mm x 609.6mm)
Tgon<sup>TM</sup> 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<sup>TM</sup> 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.
Striped adhesive option on one side designated with SA.
Double-sided adhesive is not available.