



T-gon 800 Series

Thermally and Electrically Conductive

Description

T-gon 800 is a thermally and electrically conductive, conformable interface material. Its unique grain-oriented, plate-like structure allows it to conform exactly to surfaces, thus maximizing heat transfer.

T-gon 800 has a high thermal conductivity of 140 Watts/m°C in the x and y direction and 5 Watts/m°C in the z direction, making it an excellent heat conductor and spreader.

T-gon 800 provides the ultimate replacement for thermal grease. Its use eliminates the mess associated with grease.

T-gon 800 has the ability to conform to challenging spaces, such as pits, gouges, and even microscopic irregularities with only moderate pressure. This minimizes the thermal interface resistance. Also the need for costly surface finishing is eliminated.

T-gon 800 exhibits virtually no creep relaxation as a result of heat or pressure. Therefore, contact is maintained for the life of the interface.

Applications

- Between semiconductor packages and heat sinks.
- Between power converters and heat sinks.
- With PGA's and most power devices.

Key Performance Properties

- Unprecedented low thermal resistances, comparable to thermal grease.
- Eliminates the mess associated with thermal grease.
- Easily fills tiny air gaps between rough or uneven mating surfaces.
- Virtually eliminates any change at the interface due to temperature or pressure. Stable from -50°C to 200°C.
- Saves labor in the production process.
- Is electrically conductive.
- Has excellent shock resistance.
- Can be cut to any size or shape.

Availability

- T-gon 800 series is supplied in three thicknesses: 5, 10, and 20 mils (0.125, 0.25 and 0.50mm)
- Standard sheets 12" x 18" (30cm x 45cm).
- Pressure sensitive adhesive on one side.
- 5 to 20 mils thicknesses available on rolls, with adhesive on one side.
- Die-cut parts to your specifications.

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Typical Properties		T-gon 805	T-gon 810	T-gon 820
General	Color	Pewter	Pewter	Pewter
	Thickness, mils	5	10	20
	Density, g/cc	1.12	1.12	1.12
	Pressure Sensitive Adhesive*	optional	optional	optional
	Fiberglass Reinforced	no	no	no
Mechanical	Tensile Strength, psi	650	650	650
	Modulus of Elasticity, psi	0.2×10^6	0.2×10^6	0.2×10^6
Thermal	Thermal Resistance, °C-in ² /W	0.082	0.098	0.142
	Thermal Conductivity, W/m°C			
	X and Y directions	140	140	140
	Z direction	5	5	5
	Continuous Use Temp, °C	-50 to 200	-50 to 200	-50 to 200
Electrical	Breakdown Voltage	na	na	na
	Electrical Resistivity, ohm-cm	15×10^{-6}	15×10^{-6}	15×10^{-6}

* A0 = no adhesive

* A1 = adhesive one side