



TIF[®]500-50-11ES Series is a thermal pad specifically designed to address the most demanding thermal challenges and highly sensitive mechanical stress environments. Combining exceptional thermal conductivity with near-fluid softness, it ensures perfect filling of contact interfaces even under ultra-low installation pressure, completely eliminating air thermal resistance. This delivers an outstanding thermal management solution and physical protection for the most precise and high-heat-flux-density electronic components.

Features

- » High thermal conductivity
- » Extremely soft, low compression stress effectively protects sensitive components
- » Self adhesive without the need for additional surface adhesive
- » Good insulation performance

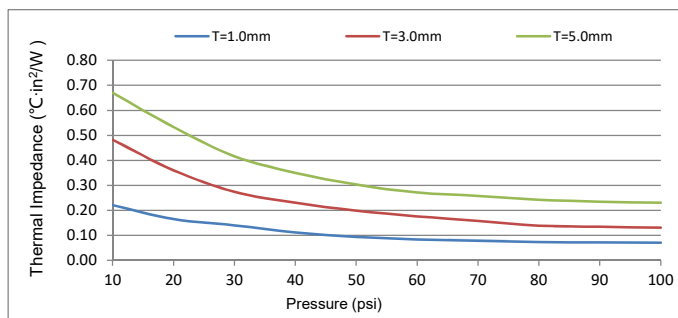
Applications

- » Power tools
- » Network communication products
- » Electric vehicle batteries
- » Computer CPU/GPU Cooling
- » New energy vehicle power systems

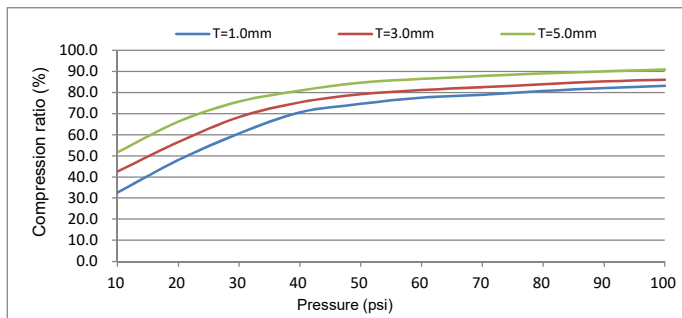
Typical Properties of TIF[®]500-50-11ES Series

Property	Value		Test Method
Color	Dark Gray		Visual
Construction	Ceramic filled silicone elastomer		-
Thickness Range (inch/mm)	0.020~0.030 0.50~0.75	0.040~0.200 1.00~5.00	ASTM D374
Hardness (Shore OO)	10	10	ASTM D2240
Density (g/cm ³)	3.3		ASTM D792
Recommended Operating Temperature (°C)	-40 ~ 200		-
Breakdown Strength (V/mm)	≥5500		ASTM D149
Dielectric Constant @1MHz	7.0		ASTM D150
Volume Resistivity (Ohm·cm)	> 1.0×10 ¹²		ASTM D257
Thermal Conductivity (W/m·K)	5.0		ASTM D5470
	5.0		ISO22007
Flame Rating	V-0		UL94 (E331100)

Thermal Impedance



Compression Ratio



Product Specifications

Standard Thickness: 0.020"(0.50 mm)~0.200" (5.00 mm) with increments of 0.010"(0.25 mm).

Standard Size: 16"×16" (406 mm×406 mm).

Component Codes:

Reinforcement Fabric: FG (Fiberglass).

Coating Options: NS1 (Non-adhesive treatment), DC1 (Single-sided hardening).

Adhesive Options: A1/A2 (Single-sided/Double-sided adhesive).

The TIF[®] series is available in custom shapes and various forms.

For other thicknesses or more information, please contact us.

Product Identifier

TIF5 00 - 50 - 11ES

Color: 11 (Dark Gray) & Hardness: 10
Thermal Conductivity: 5.0 W/m·K
Thickness: 20mils~ 200mils
Product Series

Global solutions: Local support

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TIF500-50-11ES-0726