

TIF® 500-18-11US Series is an ultra-soft thermal interface material designed specifically to protect precision components that are extremely sensitive to mechanical stress. This product combines high thermal conductivity with an exceptionally gel-like softness, achieving a low-stress perfect fit. It is suitable for addressing issues in high-precision assemblies, such as large tolerances, uneven surfaces, and the susceptibility of delicate components to mechanical damage.

Features

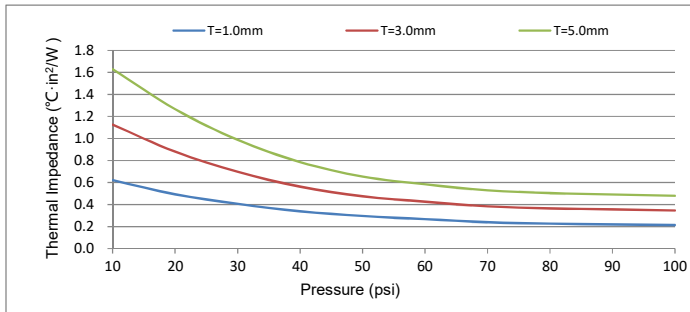
- » Good thermal conductivity
- » Ultra-soft and highly conformable
- » Self-adhesive without the need for additional surface adhesive
- » Good insulation performance

Applications

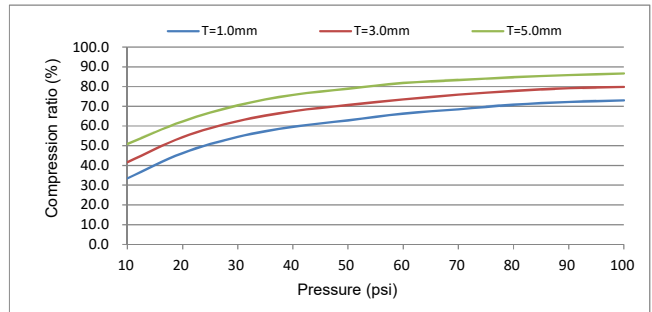
- » Home appliance industry
- » Power module
- » Wearable device
- » Solar photovoltaic panel
- » LED lighting fixtures

Typical Properties of TIF® 500-18-11US Series			
Property	Value		Test Method
Color	Dark Gray		Visual
Construction	Ceramic filled silicone elastomer		-
Thickness Range (inch/mm)	0.010~0.020 0.25~0.50	0.030~0.200 0.75~5.00	ASTM D374
Hardness (Shore OO)	65	20	ASTM D2240
Density (g/cm ³)	2.5		ASTM D792
Recommended Operating Temperature (°C)	-40 ~ 200		-
Breakdown Voltage (V/mm)	≥5500		ASTM D149
Dielectric Constant @1MHz	4.2		ASTM D150
Volume Resistivity (Ohm·cm)	> 1.0×10 ¹²		ASTM D257
Thermal Conductivity (W/m·K)	1.8		ASTM D5470
	1.8		ISO22007
Flame Rating	V-0		UL94 (E331100)

Thermal Impedance



Compression Ratio



Product Specifications

Standard Thickness: 0.010" (0.25 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),

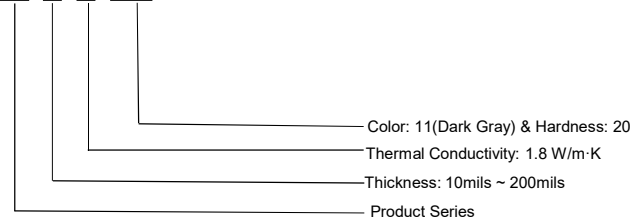
DC1 (Single-sided hardening).

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 - 18 - 11US



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