

Thermal Conductive Gap Fillers



◆ Features and Benefits

- 2.6W/mK thermal conductivity
- Highly compressible and cost effective
- Naturally tacky
- Electrically Isolating

◆ Typical Applications

- Cooling Components to the Chassis, Frame, or other type of heat spreader
- Mass Storage Drives
- Heat Pipe assemblies
- RDRAM Memory Modules
- Motor Control
- Telecommunication Hardware

TIF500 series is an ultimately very soft, freestanding gap filler that is more compressible than most other gap fillers, at pressures of 50psi, will deflect to over 50% the original thickness, this high rate of compliancy allows the material to "totally blanket" the component, enhancing thermal transfer. The material has a very low compression set enabling the pad to be reused many times.

TIF500 series combines good thermal conductivity of 2.6W/mK with high compressibility to produce low thermal resistance. TIF500 series is electrically non-conductivity, stable from -50°C to 200°C. The material is naturally tacky. Additional adhesive coating is not required.

Typical Properties of TIF500 series

Product Name	TIF500	Test Method
Color	Violet	Visual
Construction & Composition	Ceramic filled silicone elastomer	***
Thickness (inch/mm)	0.010 to 0.200 inch 0.254 to 5.08mm	ASTM D751
Specific Gravity, (g/cc)	2.5	ASTM D297
Heat Capacity, (J/g-K)	1.0	ASTM C351
Hardness, (Shore A)	10	ASTM 2240
Tensile Strength, (psi)	65	ASTM D412
Continuous Use Temp, (°F/°C)	(-58 to 392°F) (-50 to 200°C)	***
Electrical		
Dielectric Breakdown Voltage, (VAC)	>3500	ASTM D149
Dielectric Constant, (1000 Hz)	7.5	ASTM D150
Volume Resistivity, (Ohm-meter)	7.8 X10"	ASTM D257
Flame Rating	94 V0	equivalent UL
Thermal		
Thermal Conductivity, (W/m-K)	2.6	ASTM D5470