

SILTEL SG-TC2.4

Thermally Conductive Gap Filler Pad

Free Standing or Fiberglass Reinforced (GF)

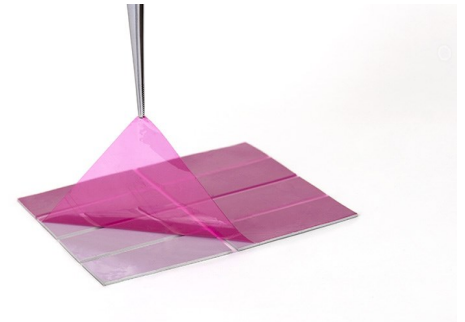
Thermal Conductivity: 2.4 W/m-K

0.5mm / 1.0mm / 1.5mm / 2.0mm / 3.00mm

SILTEL SG-TC2.4 (unsupported and fiberglass supported) is an electrically insulating thermally conductive silicone gap filler ideal for use in applications where thermal transfer over large gaps caused by big tolerances or different stack up heights must be achieved. Due to the specific formulation and filling of ceramic particles, the silicone elastomer has a high thermal conductivity of 2.4 W/m-K. With it's ULTRA soft and flexible design, it perfectly mates to irregular surfaces thus filling gaps at low pressures.

In an unsupported form (SG-TC2.4), the pad is designed with a natural tackiness on both sides for easy pad placement and quick assembly. In a fiberglass supported form (SG-TC2.4-GF), natural tack is present on one side offering an increase in overall handling due to its supported form.

SILTEL SG-TC2.4 and SG-TC2.4-GF is available in standard size sheets or TIMTEL cut parts to match a wide range of industry standard or customer defined outlines.



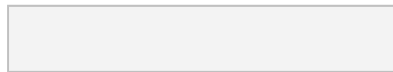
- ULTRA Soft and Compliant Design
- Operates at Minimum / Low Pressure
- Chemical Resistant with Long Term Stability
- Shock Absorbing
- Unsupported or Supported Fiberglass Format
- Sheets or TIMTEL Cut Parts (Standard or Custom)

Typical Applications

- Low pressure / Gap Filling / High Surface Irregularity
- SMD Packages
- Through-Hole Via's
- Capacitors
- Devices to heat pipes for use within automotive, consumer electronics / medical device and industrial electronics.

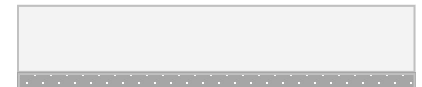
SG-TC2.4 Cross Section (unsupported)

(standard is natural tack both sides)



SG-TC2.4-GF Cross Section (supported)

(Tacky one side by fiberglass reinforcement)



SG-TC2.4 (or GF) General Properties

Thermal Conductivity.....2.4 W/m-K
 Hardness.....25 Shore 00
 Dielectric Strength.....4 kV/mm
 Volume Resistivity..... 1.7×10^{13} Ohm-cm
 Operating Temperature.....-50°C to 200°C
 ColorGray
 RoHS Compliant (2011 / 65/ EU).....Yes

Standard Thickness Options (standard and GF)

SG.50-TC2.4 (or GF).....0.020" (0.50mm)
 SG1.0-TC2.4 (or GF).....0.040" (1.00mm)
 SG1.5-TC2.4 (or GF).....0.060" (1.50mm)
 SG2.0-TC2.4 (or GF).....0.078" (2.00mm)
 SG3.0-TC2.4 (or GF).....0.118" (3.00mm)

Additional thicknesses of 4mm, 5mm and 10mm available

0.020" / 0.50mm Thermal Performance

Thermal Impedance @ 10 PSI.....0.630 °C in² / Watt
 Thermal Impedance @ 30 PSI.....0.530 °C in² / Watt
 Thermal Impedance @ 60 PSI.....0.440 °C in² / Watt

0.040" / 1.00mm Thermal Performance

Thermal Impedance @ 10 PSI.....1.260 °C in² / Watt
 Thermal Impedance @ 30 PSI.....1.150 °C in² / Watt
 Thermal Impedance @ 60 PSI.....1.000 °C in² / Watt

0.060" / 1.50mm Thermal Performance

Thermal Impedance @ 10 PSI.....1.550 °C in² / Watt
 Thermal Impedance @ 30 PSI.....1.390 °C in² / Watt
 Thermal Impedance @ 60 PSI.....1.181 °C in² / Watt

0.078" / 2.00mm Thermal Performance

Thermal Impedance @ 10 PSI.....2.030 °C in² / Watt
 Thermal Impedance @ 30 PSI.....1.790 °C in² / Watt
 Thermal Impedance @ 60 PSI.....1.490 °C in² / Watt

0.118" / 3.00mm Thermal Performance

Thermal Impedance @ 10 PSI.....2.770 °C in² / Watt
 Thermal Impedance @ 30 PSI.....2.500 °C in² / Watt
 Thermal Impedance @ 60 PSI.....2.050 °C in² / Watt

SILTEL SG-TC2.4 General Properties / Form Characteristics

Characteristic	SILTEL SG-TC2.4
Base Material	Ceramic Filled Silicone
Substrate	None (standard) GF (fiberglass supported)
Color	Gray
Available Formats	Sheets or Cut Pads (standard or custom)
TIMTEL Cutting Capabilities	Finished Cut Gap Pad Parts
TIMTEL Cut Delivery Formats	Individuals or Multiples per Card
TIMTEL Cut Dimensional Tolerances	0.010"(0.25mm) to 0.020"(0.51mm) (depending on thickness, determined @ design review)
Storage	Cool, dry location at or below 80F/ 27C.
Shelf Life	2 years from date of manufacture

SILTEL Samples for Testing

Thermal material evaluation is always critical when designing in a new material or developing a new product. Sheet samples of SILTEL are available for preliminary testing to determine the optimal SILTEL thickness as well as overall material construction best suited within the scope of your application requirements.

Want to test samples per your required die cut part? Our razor plotter sampling machine allows us to provide customers SILTEL material already cut to their required outline for testing. Plotter formed samples provide our customers the ability to test not only the SILTEL material itself, but their required outline as well without incurring the expense of production tooling.

Contact TIMTEL to request sample sheets or plotter formed samples for testing.