

SILTEL SG-TC2.5M

Ultra-Soft Thermally Conductive Gap Filler Pad

Thermal Conductivity: 2.5 W/m-K

1.0mm / 1.5mm / 2.0mm / 3.0mm

SILTEL SG-TC2.5M is an electrically insulating ultra-soft 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 high thermal conductivity of 2.5 W/m-K. With its soft and flexible design, it perfectly mates to irregular surfaces thus filling gaps at low pressures.

SG-TC2.5M is designed with a natural tackiness in order to allow for easy and reliable pre-assembly of the pad to the application surface.

SILTEL SG-TC2.5M is available 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 Low Pressure
- Chemical Resistant with Long Term Stability
- Shock Absorbing
- Drop in Place Installation - Tacky Surface
- Sheets or TIMTEL Cut Parts (Standard or Custom)

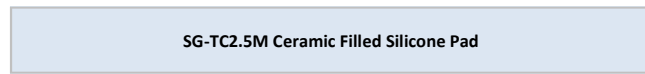


Typical Applications

- 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.

Standard SILTEL SG-TC2.5M Cross Section

(Light tack both sides)



SILTEL SG-TC2.5M General Properties / Form Characteristics

Characteristic	SILTEL SG-TC2.5M
Base Material	Ceramic Filled Silicone
Substrate	None
Color	Light Blue
Available Formats	Sheets or Cut Pads (standard or custom)
TIMTEL Cutting Capabilities	Razor Plotter Cut for Gap Filler Pads
TIMTEL Die Cut Delivery Formats	Individuals or Multiples per Card
TIMTEL Die Cut Dimensional Tolerances	0.010"(0.25mm) to 0.030"(0.76mm) (depending on thickness)
Storage	Cool, dry location at or below 80F/ 27C. Store away from UV
Shelf Life	2 years from date of manufacture

SG-TC2.5M General Properties

Thermal Conductivity.....2.5 W/m-K
 Hardness.....20 Shore 00
 Dielectric Strength.....10 kV/mm
 Volume Resistivity..... 1.0×10^{11} Ohm-cm
 Dielectric Constant.....5.2 (@ 1kHz)
 Operating Temperature.....-60°C to 180°C
 ColorLight Blue

Standard Thickness Options

SG1.0-TC2.5M.....0.040" (1.00mm)
 SG1.5-TC2.5M.....0.060" (1.50mm)
 SG2.0-TC2.5M.....0.078" (2.00mm)
 SG3.0-TC2.5M.....0.118" (3.00mm)

0.040" / 1.00mm Thermal Performance

Thermal Impedance @ 10 PSI.....0.490 °C in² / Watt
 Thermal Impedance @ 30 PSI.....0.420 °C in² / Watt
 Thermal Impedance @ 60 PSI.....0.370 °C in² / Watt

0.060" / 1.50mm Thermal Performance

Thermal Impedance @ 10 PSI.....0.700 °C in² / Watt
 Thermal Impedance @ 30 PSI.....0.570 °C in² / Watt
 Thermal Impedance @ 60 PSI.....0.500 °C in² / Watt

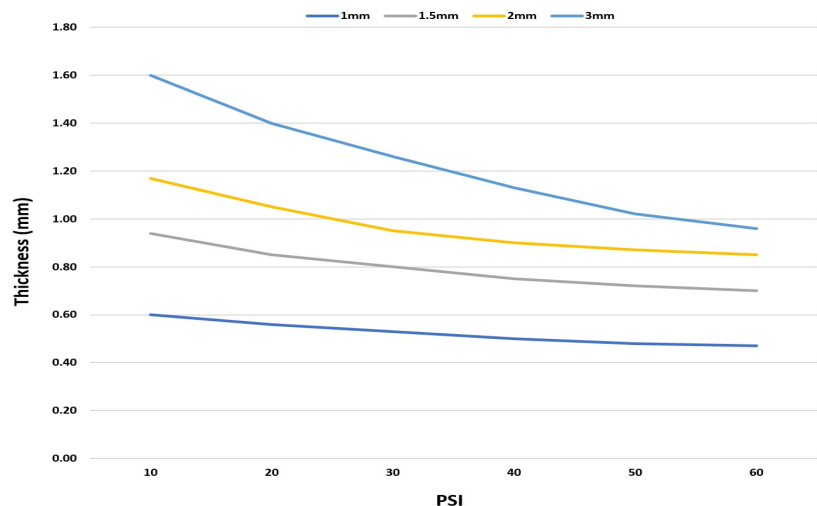
0.078" / 2.00mm Thermal Performance

Thermal Impedance @ 10 PSI.....0.890 °C in² / Watt
 Thermal Impedance @ 30 PSI.....0.700 °C in² / Watt
 Thermal Impedance @ 60 PSI.....0.580 °C in² / Watt

0.118" / 3.00mm Thermal Performance

Thermal Impedance @ 10 PSI.....1.200 °C in² / Watt
 Thermal Impedance @ 30 PSI.....0.890 °C in² / Watt
 Thermal Impedance @ 60 PSI.....0.740 °C in² / Watt

Compression vs Thickness



FASTEL ADHESIVES | TIMTEL THERMAL MANAGEMENT