SILICONE GAP FILLER PAD TGF-Z-SI

soft, flexible

TGF-Z-SI is an electrically insulating thermally conductive silicone gap filler. It is ideal for use in applications where thermal transfer over large gaps caused e.g. by big tolerances or different stack up heigths must be achieved. Due to the specific formulation and filling with ceramic particles the silicone elastomer has an extremely high thermal conductivity. Through its softness and plasticity the material perfectly mates to irregular surfaces thus optimizing the thermal contact at low pressure. By its use the total thermal resistance is minimised. The natural tackiness of the material allows for an easy and reliable pre-assembly.

Release 10/ 2022

PROPERTIES

- Soft and compliable
- Thermal conductivity: 11 W/mK
- Operates at low pressure
- Extraordinary chemical resistance and longterm stability
- Shock absorbing
- Easy mounting through self tackiness
- One or two-side self-tacky

AVAILABILITY

- Sheet 200 x 300 mm
- Tacky on both sides (TGF-ZXXXX-SI)
- Tacky on one side by talcum coating (TGF-ZXXXX-SI-A1)
- Die cut parts
- Kiss cut parts on sheet

APPLICATION EXAMPLES

Thermal link of:

- SMD packages
- Through-hole vias
- RDRAMs memory modules
- Capacitors

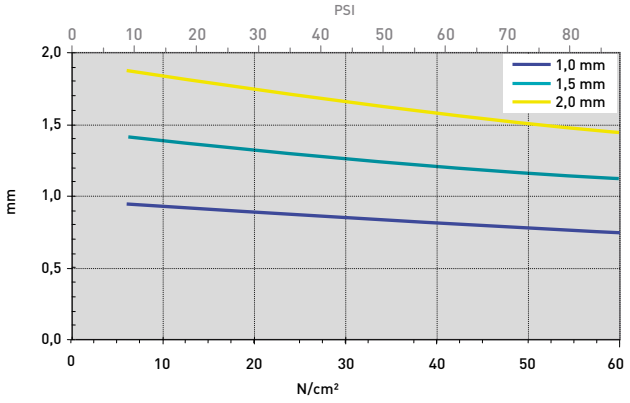
For use in Automotive applications / Laptops / Medicine engineering / Embedded-boards

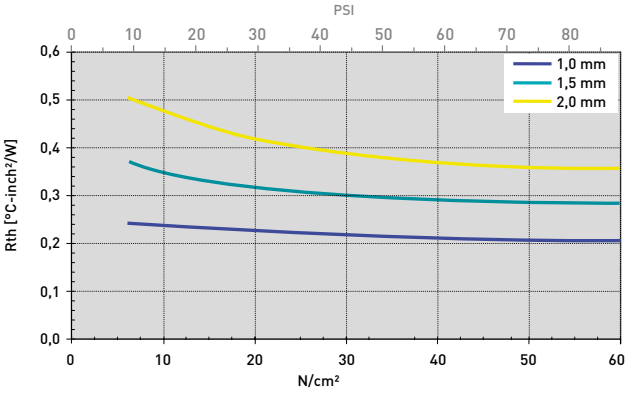
PROPERTY	UNIT	TGF-Z1000-SI	TGF-Z1500-SI	TGF-Z2000-SI
MATERIAL		Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone
Colour		Light grey	Light grey	Light grey
Density	g/cm³	3.4	3.4	3.4
Thickness	mm	1.0 ±0.2	1.5 ±0.2	2.0 ±0.3
Hardness	Shore 00	72	72	72
UL Flammability (Equivalent)	UL 94	V0	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes
THERMAL				
Resistance¹ @ 60 PSI @ Thickness	°C-inch²/W (mm)	0.21 (0.82 mm)	0.30 (1.21 mm)	0.37 (1.59 mm)
Resistance¹ @ 30 PSI @ Thickness	°C-inch²/W (mm)	0.23 (0.89 mm)	0.32 (1.33 mm)	0.42 (1.76 mm)
Resistance¹ @ 10 PSI @ Thickness	°C-inch²/W (mm)	0.24 (0.95 mm)	0.37 (1.41 mm)	0.50 (1.88 mm)
Thermal Conductivity	W/mK	11.0	11.0	11.0
Operating Temperature Range	°C	- 50 to + 150	- 50 to + 150	- 50 to + 150
ELECTRICALLY				
Dielectric Strength	kV / mm	>14	>14	>14
Dielectric Constant	Ohm - cm	1.0 x 10^{11}	1.0 x 10^{11}	1.0 x 10^{11}
Volume Resistivity	1 MHz	ca. 7.2	ca. 7.2	ca. 7.2

Measurement technique according to: ¹ASTM D 5470. All data without warranty and subject to change. Please contact us for further data and information.

Thicknesses: 1.0 mm / 1.5 mm / 2.0 mm

mm vs. N/cm² (PSI) / Rth vs. N/cm² (PSI)





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