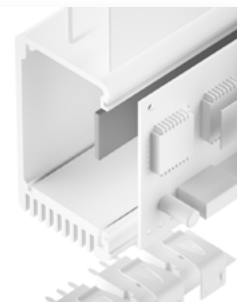


SILICONE GAP FILLER PAD TGF-VP-SI

soft, flexible

TGF-VP-SI is an electrically insulating thermally conductive high performance silicone gap filler. It is ideal for use in applications where a very good thermal transfer over large gaps caused e.g. by big tolerances or different stack up heights 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 flexibility the material perfectly mates to irregular surfaces thus filling gaps 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. For an easy and reliable preassembly the interface material can optionally be supplied with an adhesive coating on one side.



Release 11 / 2024

Technical Data Sheet

PROPERTIES

- ☐ Soft and compliant
- ☐ Thermal conductivity: 5.5 W/mK
- ☐ Operates at low pressure
- ☐ Extraordinary chemical resistance and longterm stability
- ☐ Shock absorbing
- ☐ Easy mounting through self tackiness

AVAILABILITY

- ☐ Sheet 200 x 300 mm (TGF-VPXXXX-SI)
- ☐ One side adhesive (TGF-VPXXXX-SI-AD1)
- ☐ Die cut parts
- ☐ Kiss cut parts on sheet

APPLICATION EXAMPLES

Thermal link of:

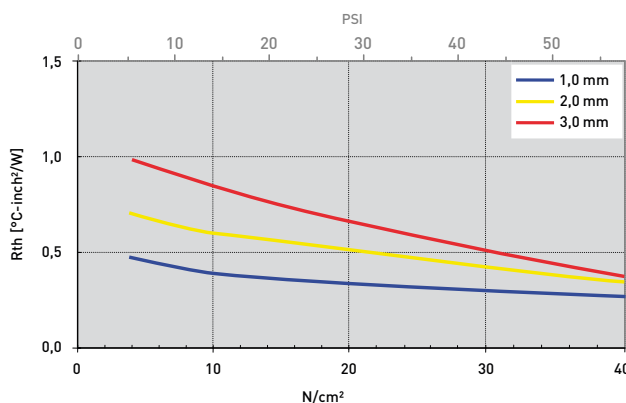
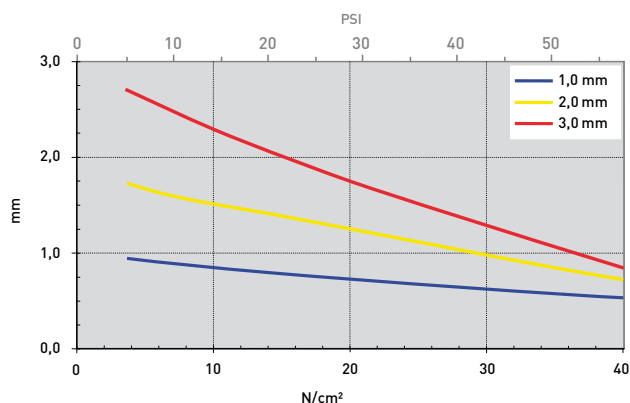
- ☐ SMD packages
- ☐ Through-hole vias
- ☐ RDRAMs Smemory modules
- ☐ Flip Chips, DSPs, BGAs, PPGAs For use in Automotive applications / Laptops / Medicine engineering / Embedded boards

PROPERTY	UNIT	TGF-VP1000-SI	TGF-VP2000-SI	TGF-VP3000-SI
MATERIAL				
Colour		Ceramic filled silicone Grey	Ceramic filled silicone Grey	Ceramic filled silicone Grey
Specific Gravity	g/cm ³	3.1	3.1	3.1
Thickness	mm	1.0 ±0.10	2.0 ±0.20	3.0 ±0.25
Hardness	Shore 00	60	60	60
Shelf Life (unopened, dry storage conditions @ < 40°C)	Months	12	12	12
UL Flammability (Equivalent) ¹	UL 94	V0	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes
THERMAL				
Resistance ² @ 60 PSI @ Thickness	°C-inch ² /W (mm)	0.26 [0.53]	0.34 [0.72]	0.37 [0.84]
Resistance ² @ 30 PSI @ Thickness	°C-inch ² /W (mm)	0.33 [0.73]	0.52 [1.26]	0.66 [1.75]
Resistance ² @ 10 PSI @ Thickness	°C-inch ² /W (mm)	0.43 [0.90]	0.64 [1.60]	0.91 [2.50]
Thermal Conductivity ²	W/mK	5.5	5.5	5.5
Operating Temperature Range	°C	- 50 to + 180	- 50 to + 180	- 50 to + 180
ELECTRICALLY				
Dielectric Strength	kV / mm	5	5	5
Volume Resistivity	Ohm - cm	≥1.0 x 10 ¹³	≥1.0 x 10 ¹³	≥1.0 x 10 ¹³
Dielectric Constant	@ 1 MHz	5.5	5.5	5.5

Measurement technique according to: ¹Without adhesive coating, ²ASTM 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 / 2.5 mm / 3.0 mm / 4.0 mm / 5.0 mm

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



All technical data and information are without warranty and believed to be reliable and accurate, corresponding to the latest state of the art. Since the products are not provided to conform with mutually agreed specifications and their use and processing are unknown we cannot guarantee results, freedom from patent infringement, or their suitability for any application. Product testing by the applicant is recommended. We reserve the right of changes.