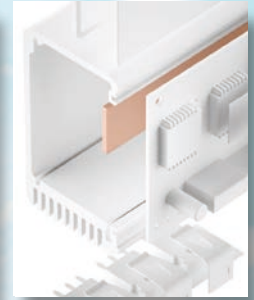


# SILICONE GAP FILLER TGF-MXS-SI

ultra soft, with or without fibreglass reinforcement



TGF-MXS-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 heights must be achieved. Due to the specific formulation and filling with ceramic particles the silicone elastomer has a high thermal conductivity. Through its ultra softness and flexibility the material perfectly mates to irregular surfaces thus filling gaps at minimum pressure. By its use the total thermal resistance is minimised. The natural tackiness of the material allows for an easy and reliable pre-assembly. The optional conductive fibreglass reinforced silicone laminate on one side provides for a high mechanic stability and strength.



Release 04 / 2014

## PROPERTIES

- Ultra soft and compliant
- Thermal conductivity: 2.4 W/mK
- Operates at minimum pressure
- Extraordinary chemical resistance and longterm stability
- Residue-free removal after use
- Shock absorbing
- Easy mounting through self tackiness
- One or two-side self-tacky

## AVAILABILITY

- Sheet 200 x 400 mm
- Tacky on both sides (TGF-MXSXXX-SI)
- Tacky on one side by fibreglass reinforced laminate (TGF-MXSXXX-SI-GF)
- Die cut parts
- Kiss cut parts on sheet

## APPLICATION EXAMPLES

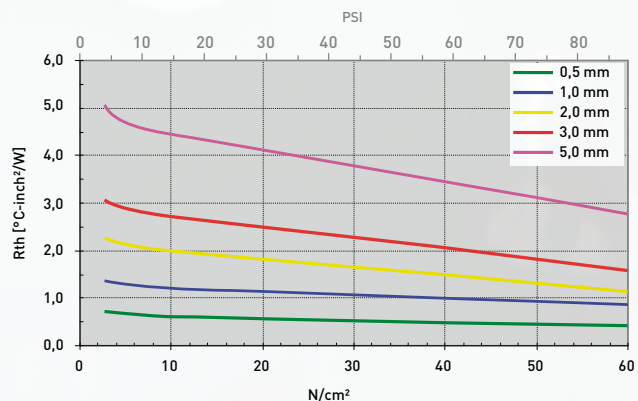
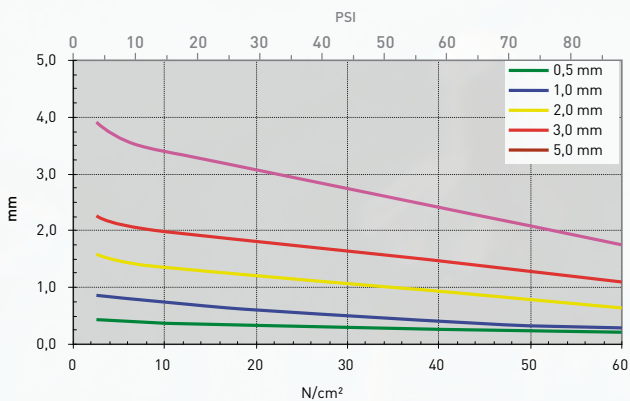
- Thermal link of:
- SMD packages
  - Through-hole vias
  - Capacitors
  - Electronic parts to heat pipes
- For use in Automotive applications / Laptops / Medicine engineering / Industrial PCs

Property	Unit	TGF-MXS0500-SI	TGF-MXS1000-SI	TGF-MXS2000-SI	TGF-MXS3000-SI
<b>Material</b>		Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone
Colour		Grey (/ Red laminate)	Grey (/ Red laminate)	Grey (/ Red laminate)	Grey (/ Red laminate)
Optional Reinforcement (TGF-MXSXXX-SI-GF)		Fibreglass laminate	Fibreglass laminate	Fibreglass laminate	Fibreglass laminate
Thickness	mm	0.5	1.0	2.0	3.0
Hardness	Shore 00	15	15	15	15
UL Flammability	UL 94	V1	V1	V1	V0
RoHS Conformity	2002/95/EC	Yes	Yes	Yes	Yes
<b>Thermal</b>					
Resistance <sup>1</sup> @ 60 PSI @ Thickness	°C-inch <sup>2</sup> /W (mm)	0.44 (0.25)	1.00 (0.45)	1.49 (0.86)	2.05 (1.50)
Resistance <sup>1</sup> @ 30 PSI @ Thickness	°C-inch <sup>2</sup> /W (mm)	0.53 (0.32)	1.15 (0.63)	1.79 (1.15)	2.50 (1.73)
Resistance <sup>1</sup> @ 10 PSI @ Thickness	°C-inch <sup>2</sup> /W (mm)	0.63 (0.40)	1.26 (0.75)	2.03 (1.40)	2.77 (2.05)
Thermal Conductivity	W/mK	2.4	2.4	2.4	2.4
Operating Temperature Range	°C	- 40 to + 200	- 40 to + 200	- 40 to + 200	- 40 to + 200
<b>Electrical</b>					
Dielectric Strength	kV / mm	4	4	4	4
Volume Resistivity	Ohm - cm	1.7 x 10 <sup>13</sup>	1.7 x 10 <sup>13</sup>	1.7 x 10 <sup>13</sup>	1.7 x 10 <sup>13</sup>

Test Methods: <sup>1</sup>ASTM D 5470. All data without warranty and subject to change. Please contact us for further data and information.

Thicknesses: 0.5 mm / 1.0 mm / 2.0 mm / 3.0 mm / 4.0 mm / 5.0 mm / ... / 10.0 mm. Other thicknesses on request

mm vs. N/cm<sup>2</sup> (PSI) / Rth vs. N/cm<sup>2</sup> (PSI)



All technical data and information are without warranty and believed to be reliable and accurate. 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.