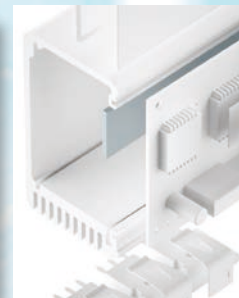


# SILICONE GAP FILLER TGF-Z-SI

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 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 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 04 / 2014

## PROPERTIES

- Soft and compliant
- Thermal conductivity: 11 W/mK
- Operates at low pressure
- Extraordinary chemical resistance and long-term stability
- Residue-free removal after use
- 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
<b>Material</b>		Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone
Colour		Light grey	Light grey	Light grey
Density	g/cm <sup>3</sup>	3.3	3.3	3.3
Hardness	mm	1.0	1.5	2.0
Thickness	Shore 00	64	64	64
UL Flammability (Equivalent)	UL 94	V0	V0	V0
RoHS Conformity	2002/95/EC	Yes	Yes	Yes
<b>Thermal</b>				
Resistance <sup>1</sup>	°C-inch <sup>2</sup> /W	0.17 @ 0.90 mm	0.24 @ 1.40 mm	0.30 @ 1.80 mm
Resistance <sup>1</sup>	°C-inch <sup>2</sup> /W	0.15 @ 0.70 mm	0.23 @ 1.20 mm	0.27 @ 1.60 mm
Thermal Conductivity	W/mK	11.0	11.0	11.0
Operating Temperature Range	°C	- 50 to + 180	- 50 to + 180	- 50 to + 180
<b>Electrically</b>				
Dielectric Strength	kV / mm	>10	>10	>10
Dielectric Constant	Ohm - cm	7.0 x 10 <sup>11</sup>	7.0 x 10 <sup>11</sup>	7.0 x 10 <sup>11</sup>
Volume Resistivity	1 MHz	ca. 7.5	ca. 7.5	ca. 7.5

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: 1.0 mm / 1.5 mm / 2.0 mm

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.