

# SILICONE GAP FILLER TGF-ZP-SI

plastic

TGF-ZP-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 extreme softness and plasticity the material perfectly mates to irregular surfaces thus filling gaps at almost zero pressure. By its use the total thermal resistance is minimised. The natural tackiness of the material allows for an easy and reliable pre-assembly.



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## PROPERTIES

- Plastic
- Extremely soft and compliant
- Thermal conductivity: 11 W/mK
- Operates at almost zero pressure
- For minimal gaps
- Extraordinary chemical resistance and longterm stability
- Easy mounting through self tackiness

## AVAILABILITY

- Sheet 300 x 200 mm
- Tacky on both sides (TGF-ZPXXX-SI)
- 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

Technical Data Sheet

PROPERTY	UNIT	TGF-ZP1500-SI	TGF-ZP2000-SI
<b>MATERIAL</b>			
		Ceramic filled silicone	Ceramic filled silicone
Colour		Light grey	Light grey
Reinforcement		None	None
Thickness	mm	1.5 <sup>+0.50</sup> <sub>-0.00</sub>	2.0 <sup>+0.70</sup> <sub>-0.00</sub>
Density	g/cm <sup>3</sup>	3.3	3.3
UL Flammability	UL 94	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes
<b>THERMAL</b>			
Resistance <sup>1</sup> @ 1.5 mm	°C-inch <sup>2</sup> /W	---	0.24
Resistance <sup>1</sup> @ 0.8 mm	°C-inch <sup>2</sup> /W	0.14	0.14
Resistance <sup>1</sup> @ 0.5 mm	°C-inch <sup>2</sup> /W	0.10	0.10
Resistance <sup>1</sup> @ 0.2 mm	°C-inch <sup>2</sup> /W	0.06	0.06
Thermal Conductivity	W/mK	11	11
Operating Temperature Range	°C	- 50 to + 180	-50 to + 180
<b>ELECTRICAL</b>			
Dielectric Strength	kV / mm	11	11
Dielectric Constant	@ 1 MHz	7.5	7.5
Volume Resistivity	Ohm - cm	7.0 x 10 <sup>7</sup>	7.0 x 10 <sup>7</sup>

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

Thicknesses: 1.5 mm / 2.0 mm

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