HALA

very soft, flexible

TGF-TSS-SI is an electrically insulating thermally conductive high performance 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 very high thermal conductivity. Through its extraordinary softness and flexibility the material perfectly mates to irregular surfaces thus filling gaps at very 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.



PROPERTIES

- Extremely soft and compliable
- Thermal conductivity: 3.2 W/mK
- Operates at minimum pressure
- Extraordinary chemical resistance and longterm stability
- Shock absorbing
- Easy mounting through self tackiness

AVAILABILITY

- ☐ Sheet 300 x 400 mm
- □ Tacky on both sides (TGF-TSSXXXX-SI)
- Die cut parts
- Kiss cut parts on sheet

APPLICATION EXAMPLES

Thermal link of:

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

PROPERTY UNIT TGF-TSS0500-SI TGF-TSS1000-SI TGF-TSS2000-SI TGF-TSS3000-SI TGF-TSS5000-SI

MATERIAL		Ceramic filled silicone				
Colour		Light reddish purple	Light reddish purple	Light reddish purple	Light reddish purple	Light reddish purple
Thickness	mm	0.5 ±0.10	1.0 ±0.15	2.0 ±0.20	3.0 ±0.25	5.0 ±0.30
Hardness	Shore 00	37	37	37	37	37
JL Flammability	UL 94	V0	V0	V0	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes	Yes	Yes
THERMAL						
Resistance¹ @ 60 PSI @ Thickness	°C-inch²/W (mm)	0.22 (0.37)	0.40 (0.70)	0.68 (1.27)	0.91 (1.60)	1.08 (1.90)
Resistance¹ @ 30 PSI @ Thickness	°C-inch²/W (mm)	0.26 (0.41)	0.42 (0.77)	0.76 (1.45)	1.03 (1.89)	1.31 (2.40)
Resistance¹ @ 10 PSI @ Thickness	°C-inch²/W (mm)	0.29 (0.44)	0.49 (0.86(0.86 (1.70)	1.25 (2.31)	1.61 (3.01)
Thermal Conductivity ¹	W/mK	3.2	3.2	3.2	3.2	3.2
Operating Temperature Range	°C	- 40 to + 180	- 40 to+ 180			
ELECTRICALLY						
Dielectric Strength	kV / mm	15	15	15	15	15

Measurement technique according to: '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 / 2.5 mm / 3.0 mm / 4.0 mm / 5.0 mm





