**HALA** 

very soft, flexible

TGF-WSS-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 an extremely high thermal conductivity. Through its high 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.



Release 10/2022

**Technical Data Sheet** 

#### **PROPERTIES**

- Very soft and compliable
- Thermal conductivity: 5.5 W/mK
- Operates at very low pressure
- Extraordinary chemical resistance and longterm stability
- ☐ Shock absorbing
- $\square$  Easy mounting through self tackiness
- □ One or two-side self-tacky

### **AVAILABILITY**

- ☐ Sheet 460 x 100 mm☐ Tacky on both sides
- (TGF-WSSXXXX-SI)
  ☐ Tacky on one side
  (TGF-WSSXXXX-SI-A1)
- ☐ 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

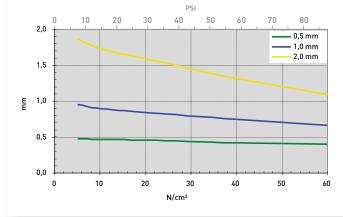
## PROPERTY UNIT TGF-WSS1000-SI TGF-WSS2000-SI

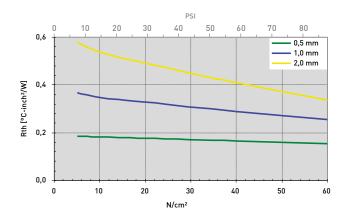
MATERIAL		Ceramic filled silicone	Ceramic filled silicone
Colour		Grey	Grey
Thickness	mm	1.0 ±0.10	2.0 ±0.20
Hardness	Shore 00	55	55
UL Flammability	UL 94	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes
THERMAL			
Resistance <sup>1</sup> @ 60 PSI @ Thickness	°C-inch²/W (mm)	0.30 (0.75)	0.41 (1.32)
Resistance <sup>1</sup> @ 30 PSI @ Thickness	°C-inch²/W (mm)	0.32 (0.85)	0.49 (1.59)
Resistance <sup>1</sup> @ 10 PSI @ Thickness	°C-inch²/W (mm)	0.36 (0.93)	0.56 (1.80)
Thermal Conductivity <sup>1</sup>	W/mK	5.5	5.5
Operating Temperature Range	°C	- 60 to + 180	- 60 to + 180
ELECTRICAL			
Dielectric Strength	kV/mm	10	10
Volume Resistivity	Ohm - cm	1.0 x 10 <sup>13</sup>	1.0 x 10 <sup>13</sup>

 $Measurement \ technique \ according \ to: \ ^1ASTM \ D \ 5470. \ All \ data \ without \ warranty \ and \ subject \ to \ change. \ Please \ contact \ us \ for \ further \ data \ and \ information. \ All \ data \ without \ warranty \ and \ subject \ to \ change. \ Please \ contact \ us \ for \ further \ data \ and \ information.$ 

Thicknesses: 0.5 mm / 1.0 mm / 2.0 mm

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





technical data a