HALA 🗗

TGF-W-SI is an electrically insulating thermally conductive very high performance silicone gap filler. It is ideal for use in applications where a very good 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 outstandingly high thermal conductivity. Through its softness and flexibility the material perfectly mates to irregular surfaces thus filling gaps 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.



PROPERTIES

- Soft and compliable
- ☐ Thermal conductivity: 4.5¹/6.0² W/mK
- Operates at low pressures
- Extraordinary chemical resistance and longterm stability
- Shock absorbing
- ☐ Two-side self-tacky

AVAILABILITY

- Sheet 420 x 210 mm
- □ Tacky on both sides (TGF-WXXXX-SI)
- Die cut parts
- Kiss cut parts on sheet

APPLICATION EXAMPLES

Thermal link of:

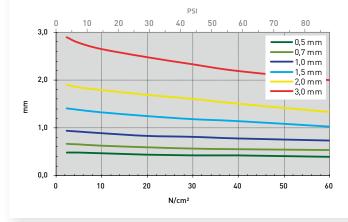
- SMD packages
- Through-hole vias
- Capacitors
- Electronic parts to heat pipes For use in Automotive applications / Laptops / Medicine engineering / Industrial PCs

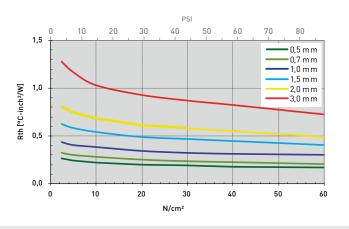
PROPERTY	UNIT	TGF-W0500-SI	TGF-W1000-SI	TGF-W2000-SI	TGF-W3000-SI
MATERIAL		Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone
Colour		Grey	Grey	Grey	Grey
Thickness	mm	0.5	1.0	2.0	3.0
Hardness	Shore 00	65	65	65	65
UL Flammability (Equivalent)	UL 94	VO	V0	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes	Yes
THERMAL					
Resistance ¹ @ 60 PSI @ Thickness	°C-inch²/W (mm)	0.16 (0.43)	0.29 (0.78)	0.54 (1.51)	0.81 (2.19)
Resistance ¹ @ 30 PSI @ Thickness	°C-inch²/W (mm)	0.18 (0.45)	0.32 (0.84)	0.60 (1.69)	0.92 (2.48)
Resistance¹ @ 10 PSI @ Thickness	°C-inch²/W (mm)	0.21 (0.48)	0.38 (0.91)	0.71 (1.83)	1.11 (2.73)
Thermal Conductivity 1	W/mK	4.5	4.5	4.5	4.5
Thermal Conductivity ²	W/mK	6.0	6.0	6.0	6.0
Operating Temperature Range	°C	- 40 to + 150			
ELECTRICALLY			'		
Dielectric Strength	kV/mm	>10	>10	>10	>10
Volume Resistivity	0hm - cm	> 1.0 x 10 ¹²			

Test Methods: "ASTM D 5470. 2 Intern method. All data without warranty and subject to change. Please contact us for further data and information.

Thicknesses: 0.5 mm / 1.0 mm / 1.5 mm / 2.0 mm / 2.5 mm / 3.0 mm

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





Technical Data Sheet

believed to be reliable and accurate corresponding to the latest state of the art. Since the products are not provided to conform with mutually agreed specifications or results, freedom from patent infringement, or their suitability for any application. Product testing by the applicant is recommended. We reserve the right of changes