SILICONE GAP FILLER TGF-JXS-SI

ultra soft, flexible

HALA

TGF-JXS-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 heigths must be achieved. Due to the specific formulation and filling with ceramic particles the silicone elastomer has a high thermal conductivity. Through its ultra softness and flexibility the material perfectly mates to irregular surfaces thus filling gaps at minimum pressure. By its use the total thermal resistance is minimised. The natural tackiness of the material allows for an easy and reliable pre-assembly. The material is one-side tacky through lamination with a thermally conductive film.

Release 04 / 2014

PROPERTIES

- Ultra soft and compliable
- Thermal conductivity: 2.0 W/mK
- Operates at minimum pressure
- Extraordinary chemical resistance and long-term stability
- Residue-free removal after use
- Shock absorbing
- Easy mounting through self tackiness
- One-side self-tacky

AVAILABILITY

- Sheet 210 x 420 mm (0.5 - 3.0 mm)
- Sheet of 210 x 350 mm (3.5 - 6.0 mm)
- Tacky on one side by film laminate (TGF-JXSXXXX-SI-A1)
- Die cut parts
- Kiss cut parts on sheet

APPLICATION EXAMPLES

Thermal link of:

- SMD packages
- Through-hole vias
- RDRAMs Smemory modules
- Flip Chips, DSPs, BGAs, PPGAs

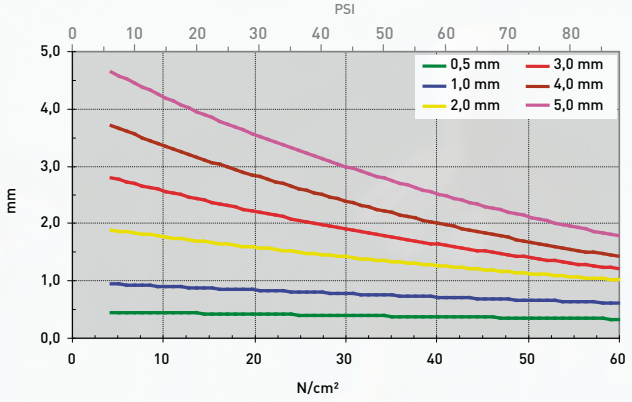
For use in Automotive applications / Laptops / Medicine engineering / Embedded boards

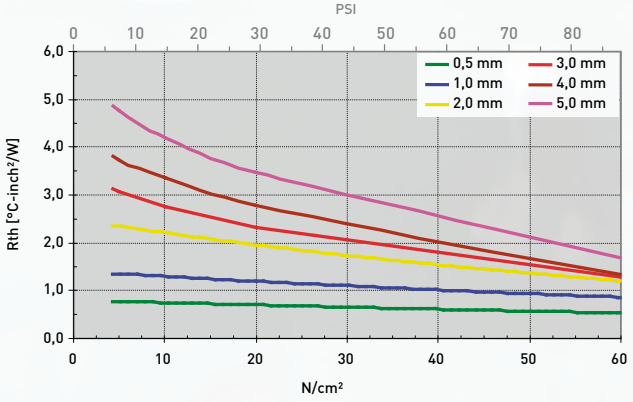
Property	Unit	TGF-JXS0500-SI-A1	TGF-JXS1000-SI-A1	TGF-JXS2000-SI-A1	TGF-JXS3000-SI-A1	TGF-JXS5000-SI-A1
Material		Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone
Colour		Light blue / Grey	Light blue / Grey	Light blue / Grey	Light blue / Grey	Light blue / Grey
Thickness	mm	0.5	1.0	2.0	2.5	3.0
Hardness	Shore 00	15	15	15	15	15
UL Flammability	UL 94	V0	V0	V0	V0	V0
RoHS Conformity	2002/95/EC	Yes	Yes	Yes	Yes	Yes
Thermal						
Resistance[1] @ 60 PSI @ Thickness	°C-inch²/W (mm)	0.64 (0.41)	1.05 (0.75)	1.57 (1.31)	1.82 (1.70)	2.59 (2.61)
Resistance[1] @ 30 PSI @ Thickness	°C-inch²/W (mm)	0.69 (0.45)	1.18 (0.86)	1.86 (1.60)	2.33 (2.22)	3.48 (3.56)
Resistance[1] @ 10 PSI @ Thickness	°C-inch²/W (mm)	0.81 (0.48)	1.37 (0.96)	2.32 (1.87)	2.96 (2.71)	4.54 (4.44)
Thermal Conductivity	W/mK	2.0	2.0	2.0	2.0	2.0
Operating Temperature Range	°C	- 40 to + 200	- 40 to + 200	- 40 to + 200	- 40 to + 200	- 40 to+ 200
Electrically						
Dielectric Strength	kV / mm	>10	>10	>10	>10	>10
Volume Resistivity	Ohm - cm	1.0 x 10^{10}	1.0 x 10^{10}	1.0 x 10^{10}	1.0 x 10^{10}	1.0 x 10^{10}

Test Methods: [1]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 / 6.0 mm

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





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