

TGF-BXS-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 a good 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 optional PSA on one side provides for a strong adhesiveness.



Release 02/202

Technical Data Sheet

PROPERTIES

- Ultra soft and compliable
- ☐ Thermal conductivity: 1.2 W/mK
- Operates at minimum pressure
- Extraordinary chemical resistance and longterm stability
- Shock-absorbing
- Easy mounting through self tackiness
- ☐ Two-side tacky or one-side adhesive

AVAILABILITY

- ☐ Sheet 200 x 400 mm
- Tacky on both sides (TGF-BXSXXXX-SI)
- PSA adhesive on one side (TGF-BXSXXXX-SI-A1)
- 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

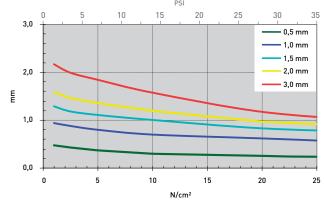
TGF-BXS0500-SI TGF-BXS1000-SI TGF-BXS1500-SI TGF-BXS2000-SI TGF-BXS3000-SI

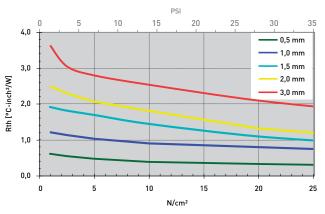
MATERIAL		Ceramic filled silicone				
Colour		Pink	Pink	Pink	Pink	Pink
Thickness	mm	0.5 ±0.10	1.0 ±0.10	1.5 ±0.15	2.0 ±0.20	3.0 ±0.30
Hardness	Shore 00	30	30	30	30	30
Density	g/cm³	2.3	2.3	2.3	2.3	2.3
UL Flammability	UL 94	VO	VO	V0	V0	VO
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes	Yes	Yes
THERMAL						
Resistance ¹ @ 35 PSI @ Thickness	°C-inch²/W (mm)	0.31 (0.24)	0.75 (0.58)	1.00 (0.80)	1.20 (0.92)	1.95 (1.09)
Resistance ¹ @ 15 PSI @ Thickness	°C-inch²/W (mm)	0.39 (0.30)	0.90 (0.70)	1.45 (1.01)	1.81 (1.19)	2.54 (1.57)
Resistance ¹ @ 7 PSI @ Thickness	°C-inch²/W (mm)	0.48 (0.37)	1.03 (0.80)	1.70 (1.11)	2.07 (1.35)	2.80 (1.84)
Thermal Conductivity ¹	W/mK	1.2	1.2	1.2	1.2	1.2
Operating Temperature Range	°C	- 40 to + 150	-40 to + 150			
ELECTRIC						
Dielectric Strength	kV / mm	> 6.5	> 6.5	> 6.5	> 6.5	> 6.5
Volume Resistivity	Ohm - cm	3.5 x 10 ¹²				
Dielectric Constant	@ 1 MHz	3.87	3.87	3.87	3.87	3.87

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 / 1.5 mm / 2.0 mm / 2.5 mm / 3.0 mm / 3.5 mm / 4.0 mm / 4.5 mm / 5.0 mm / .. 12.0 mm

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





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