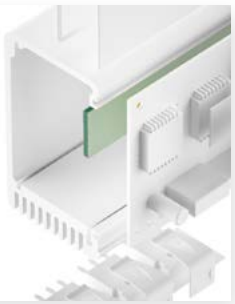
SILICONE-FREE GAP FILLER PAD TGF-IXS-NS

siloxane-free, extremely soft acrylate

TGF-IXS-NS is an electrically insulating thermally conductive silicone-free 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. The acrylate based elastomer does not contain any volatile siloxanes which are inevitably emitted by silicones. Due to the specific formulation and filling with ceramic particles the material has a high thermal conductivity. Through its extreme softness the material perfectly mates to irregular surfaces thus filling gaps and operates 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. The material is one-side tacky through lamination with a transparent film.



Release 05/2022

PROPERTIES

- Multilayer silicone-free acrylate: Soft-Ultrasoft-Film
- No emission of volatile siloxanes
- Extremely soft and compliable
- Thermal conductivity: 2 W/mK
- Operates at very low pressure
- Shock absorbing
- Easy mounting through self tackiness
- One-side self-tacky

AVAILABILITY

- Sheet 525 x 210 mm
- Tacky on one side by film laminate (TGF-IXSXXXX-NS-F)
- Die cut parts
- Kiss cut parts on sheet

APPLICATION EXAMPLES

Thermal link of:

- SMD packages
- Through-hole vias
- RDRAMs memory modules
- Electronic parts to heat pipes

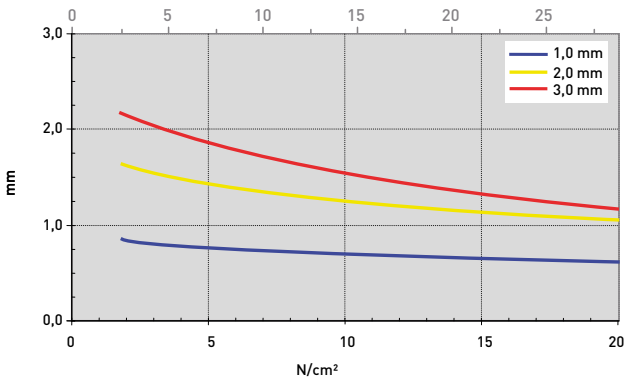
For use in Automotive applications / Laptops / Medicine engineering / Industrial PCs

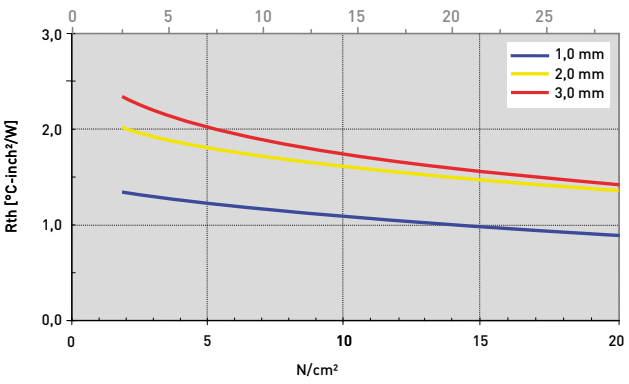
PROPERTY	UNIT	TGF-IXS1000-NS-F	TGF-IXS2000-NS-F	TGF-IXS3000-NS-F
MATERIAL		Ceramic filled multilayer silicone-free acrylic elastomer	Ceramic filled multilayer silicone-free acrylic elastomer	Ceramic filled multilayer silicone-free acrylic elastomer
Colour		Dark green / White	Dark green / White	Dark green / White
Thickness	mm	1.0 $^{\pm 0.1}$	2.0 $^{\pm 0.2}$	3.0 $^{\pm 0.3}$
Hardness (White layer)	Shore 00	27	27	27
UL Flammability	UL 94	V0	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes
THERMAL				
Resistance[1] @ 15 PSI @ Thickness	°C-inch²/W (mm)	1.07 (0.70)	1.60 (1.25)	1.70 (1.52)
Resistance[1] @ 7 PSI @ Thickness	°C-inch²/W (mm)	1.22 (0.74)	1.78 (1.40)	2.20 (1.85)
Resistance[1] @ 3 PSI @ Thickness	°C-inch²/W (mm)	1.32 (0.83)	2.00 (1.60)	2.30 (2.13)
Thermal Conductivity[1]	W/mK	2	2	2
Operating Temperature Range	°C	- 40 to + 125	- 40 to + 125	- 40 to + 125
ELECTRICAL				
Dielectric Strength	kV / mm	2.0	2.0	2.0
Volume Resistivity	Ohm - cm	1.0 x 10^{11}	1.0 x 10^{11}	> 1.0 x 10^{11}

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

Thicknesses: 1.0 mm / 2.0 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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