

siloxane-free, soft acrylate

TGF-Y-NS is an electrically insulating extremely 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 an extremely high thermal conductivity. Through its softness the material perfectly mates to irregular surfaces thus filling gaps and operates 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

- Silicone-free acrylate
- No emission of volatile siloxanes
- Soft and compliable
- Thermal conductivity: 8.0 W/mK
- Shock absorbing
- Easy mounting through self-tackiness

AVAILABILITY

- ☐ Sheet 400 x 200 mm
- Double-side tacky (TGF-YXXXX-NS)
- 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

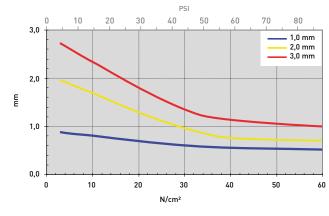
For use in Automotive applications / Laptops / Medicine engineering / Industrial PCs

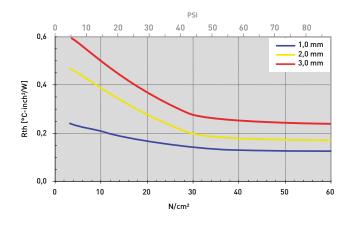
PROPERTY UNIT **TGF-Y1000-NS** TGF-Y2000-NS TGF-Y3000-NS MATERIAL Ceramic filled Ceramic filled Ceramic filled silicone-free silicone-free silicone-free acrylic elastomer acrylic elastome acrylic elastomer Colour Light Grey Light Grey Light Grey Specific Gravity 3.4 3.4 3.4 g/cm3 Thickness 1.0 ±0.10 2.0 ±0.20 3.0 ±0.30 mm 70 70 70 Hardness Shore 00 Flammability (Equivalent) **UL 94** VO V0 V0 2015 / 863 / EU RoHS Conformity Yes Yes Yes Resistance¹ @ 60 PSI @ Thickness °C-inch²/W (mm) 0.13 (0.55) 0.18 (0.75) 0.25 [1.13] 0.28 (1.30) Resistance¹ @ 30 PSI @ Thickness °C-inch²/W (mm) 0.17 (0.72) 0.37 (1.80) Resistance¹ @ 10 PSI @ Thickness °C-inch²/W (mm) 0.22 (0.83) 0.43 (1.80) 0.55 (2.52) Thermal Conductivity¹ W/mK 8.0 8.0 8.0 °C Operating Temperature Range 40 to +120 40 to +120 - 40 to +120 ELECTRICAL Dielectric Strength kV/mm 7.8 7.8 7.8 Volume Resistivity 0hm - cm 1 x 10¹ 1 x 101 1 x 101

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

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





Technical Data Sheet

curate corresponding to the latest state of the art. Since the products are not provided to conform with mutually agreed specifications a infringement, or their suitability for any application. Product testing by the applicant is recommended. We reserve the right of changes