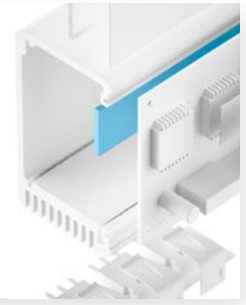


# SILICONE GAP FILLER PAD TGF-RUS-SI-A1

very soft, flexible, low density, low Volatile Siloxanes (LV)

TGF-RUS-SI-A1 is an electrically insulating thermally conductive high performance 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 very high thermal conductivity. Through its extraordinary softness and flexibility the material perfectly mates to irregular surfaces thus filling gaps 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 can be mechanically reinforced by a PI film laminate.



Release 04 / 2025

## PROPERTIES

- ☐ Extraordinary soft and compliant
- ☐ Low volatile siloxanes (LV) ≤ 70 ppm
- ☐ Thermal conductivity: 3.0 W/mK
- ☐ Operates at very low pressure
- ☐ Extraordinary chemical resistance and longterm stability
- ☐ Shock absorbing
- ☐ Easy mounting through self tackiness
- ☐ Tacky on one side

## AVAILABILITY

- ☐ Sheet 200 x 400 mm
- ☐ Tacky on one side (TGF-RUSXXX-SI-A1)
- ☐ With PI film laminate (TGF-RUSXXX-SI-LPI)
- ☐ Die cut parts
- ☐ Kiss cut parts on sheet

## APPLICATION EXAMPLES

Thermal link of:

- ☐ SMD packages
  - ☐ Through-hole vias
  - ☐ RDRAMs memory modules
  - ☐ Flip Chips, DSPs, BGAs, PPGAs
- For use in Automotive applications / Laptops / Medical engineering / Embedded boards / Graphic cards / Memory modules / LED light / LCD and plasma TV

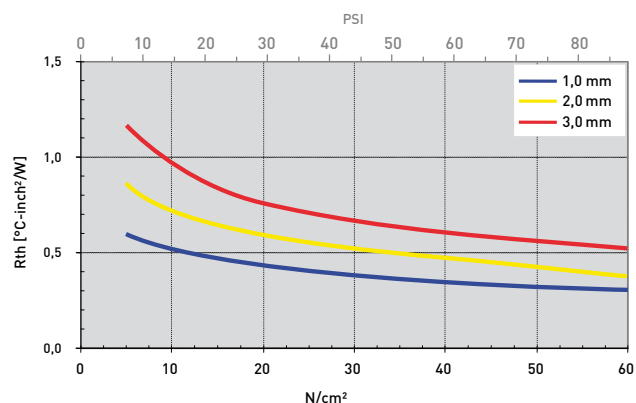
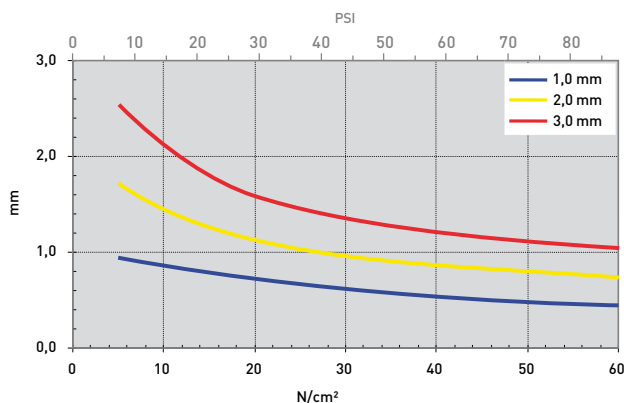
Technical Data Sheet

PROPERTY	UNIT	TGF-RUS1000-SI-A1	TGF-RUS2000-SI-A1	TGF-RUS3000-SI-A1
<b>MATERIAL</b>		Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone
Colour		Light blue	Light blue	Light blue
Thickness	mm	1.0 <sup>+0.20</sup> / <sub>-0.10</sub>	2.0 <sup>+0.20</sup>	3.0 <sup>+0.30</sup>
Density	g/cm <sup>3</sup>	2.2	2.2	2.2
Hardness	Shore 00	40	40	40
UL Flammability (Equivalent)	UL 94	V0	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes
<b>THERMAL</b>				
Resistance <sup>1</sup> @ 60 PSI @ Thickness	°C-inch <sup>2</sup> /W (mm)	0.34 [0.54]	0.48 [0.87]	0.60 [1.21]
Resistance <sup>1</sup> @ 30 PSI @ Thickness	°C-inch <sup>2</sup> /W (mm)	0.44 [0.74]	0.59 [1.13]	0.76 [1.59]
Resistance <sup>1</sup> @ 10 PSI @ Thickness	°C-inch <sup>2</sup> /W (mm)	0.56 [0.92]	0.80 [1.64]	1.08 [2.37]
Thermal Conductivity <sup>1</sup>	W/mK	3.0	3.0	3.0
Operating Temperature Range	°C	- 50 to + 150	- 50 to + 150	- 50 to + 150
<b>ELECTRICAL</b>				
Dielectric Strength	kV / mm	≥10.0	≥10.0	≥10.0
Volume Resistivity	Ohm - cm	1.0 x 10 <sup>10</sup>	1.0 x 10 <sup>10</sup>	1.0 x 10 <sup>10</sup>

Measurement technique according to: \*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

mm vs. N/cm<sup>2</sup> (PSI) / Rth vs. N/cm<sup>2</sup> (PSI)



All technical data and information are without warranty and 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 and their use and processing are unknown we cannot guarantee results, freedom from patent infringement, or their suitability for any application. Product testing by the applicant is recommended. We reserve the right of changes.