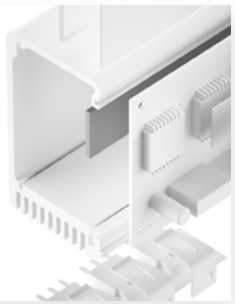
SILICONE GAP FILLER PAD TEL-XA-SI

highly thermally conductive elastomer / Low Volatile Siloxanes (LV)

HALA

TEL-XA-SI is a non dielectric, thermally conductive silicone foil for an optimised thermal coupling between electronic packages and heat sinks even over large gaps or big tolerances.Through the specific formulation and filling with highly thermally and electrically conductive particles an extraordinary high anisotropic thermal conductivity is reached. Its conformal surface structure and high softness guarantee a very good compliance to the contact surfaces at low pressure. Thus the total thermal resistance is minimised.



PROPERTIES

- High surface compliance and softness
- Low volatile siloxane (LV) ⩽ 70 ppm
- Thermal conductivity: 12[1] / 20[2] W/mK (anisotropic)
- Non dielectric
- Extraordinary chemical resistance and longterm stability
- Shock absorbing

AVAILABILITY

- Sheet 150 x 150 mm (Thickness < 2.0 mm)
- Sheet 140 x 140 mm (Thickness ⩾ 2.0 mm)
- Double-side self tacky (TEL-XAXXXX-SI)
- Die cut parts
- Kiss cut parts on sheet

APPLICATION EXAMPLES

Thermal link of:

- MOSFETs or IGBTs
- Power diodes or AC/DC converters
- Power modules

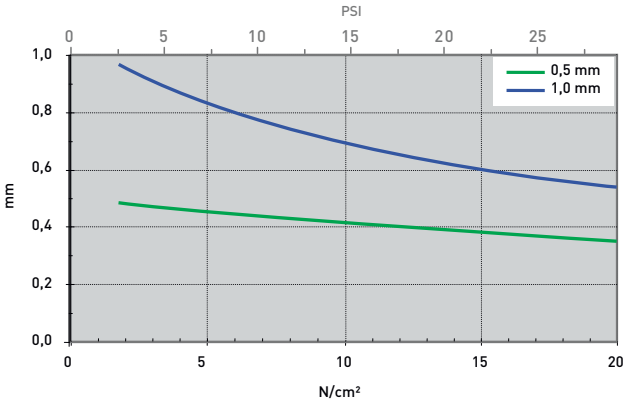
For use in Switch mode power supplies / Motor control units / Automotive engine management systems / UPS units / Solar systems

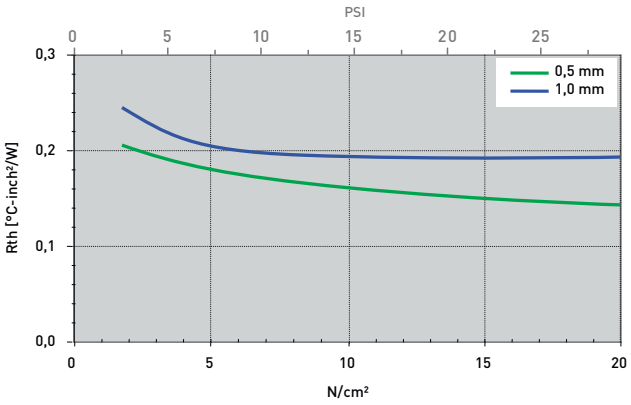
PROPERTY	UNIT	TEL-XA0500-SI	TEL-XA1000-SI
MATERIAL		Silicone with highly thermally conductive fillers	Silicone with highly thermally conductive fillers
Colour		Grey	Grey
Thickness	mm	0.5 ±0.05	1.0 ±0.1
Density	g/cm²	2.2	2.2
Hardness	Shore 00	55	55
Flammability	UL 94	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes
THERMAL			
Resistance[1] @ 15 PSI @ Thickness	°C-inch²/W (mm)	0.16 (0.42)	0.19 (0.70)
Resistance[1] @ 7 PSI @ Thickness	°C-inch²/W (mm)	0.18 (0.45)	0.21 (0.84)
Resistance[1] @ 3 PSI @ Thickness	°C-inch²/W (mm)	0.20 (0.48)	0.24 (0.95)
Thermal Conductivity[1]	W/mK	12	12
Thermal Conductivity[2]	W/mK	20	20
Operating Temperature Range	°C	- 40 to + 150	- 40 to + 150

Test Methods: [1]ASTM D 5470. [2] Internal Methode. All data without warranty and subject to change. Please contact us for further data and information.

Thicknesses: 0.25 mm / 0.5 mm / 1.0 mm / 1.5 mm / 2.0 mm / 3.0 mm

mm vs. N/cm² (PSI) / Rth vs. N/cm² (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.