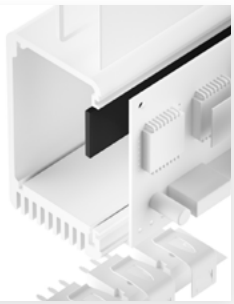
SILICONE GAP FILLER PAD TEL-YSS-SI

very soft, highly thermally conductive elastomer / Low Volatile Siloxanes (LV)

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



Release 03 / 2023

Technical Data Sheet

PROPERTIES

- High surface compliance and extraordinary softness
- Low volatile siloxane content (LV)
- Non dielectric
- Thermal conductivity: 16 W/mK (anisotropic)
- Extraordinary chemical resistance and longterm stability
- Shock absorbing

AVAILABILITY

- Sheet 130 x 130 mm (TEL-YSSXXXX-SI)
- Die cut parts
- Optional with adhesive stripes or dots (TEL-YSSXXXX-SI-A1)

APPLICATION EXAMPLES

Thermal link of:

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

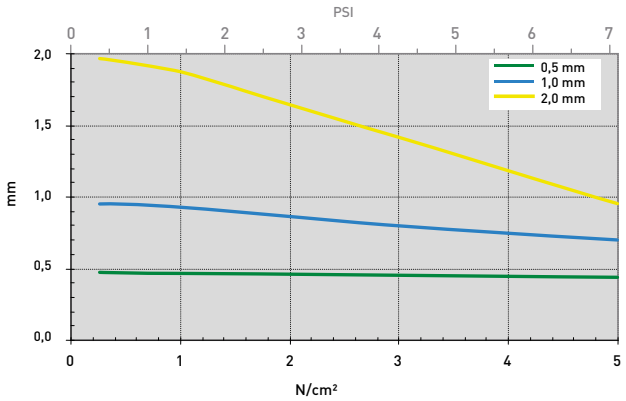
For use in Switch mode power supplies / Motor control units / Automotive engine management systems / UPS units / Solar systems

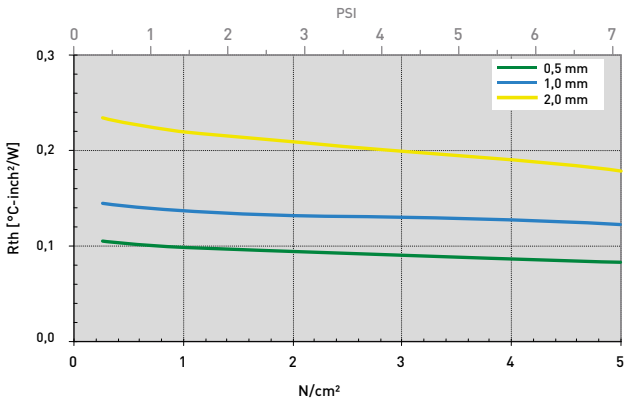
PROPERTY	UNIT	TEL-YSS0500-SI	TEL-YSS1000-SI	TEL-YSS2000-SI
MATERIAL		Graphite filled silicone elastomere	Graphite filled silicone elastomere	Graphite filled silicone elastomere
Colour		Black	Black	Black
Thickness	mm	0.5 ±0.05	1.0 ±0.10	2.0 ±0.20
Hardness	Shore 00	40	40	40
Flammability	UL 94	V0	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes
THERMAL				
Resistance[1] @ 7.5 PSI @ Thickness	°C-inch²/W (mm)	0.083 (0.42)	0.124 (0.700)	0.180 (0.954)
Resistance[1] @ 3.5 PSI @ Thickness	°C-inch²/W (mm)	0.089 (0.45)	0.129 (0.785)	0.205 (1.550)
Resistance[1] @ 1.5 PSI @ Thickness	°C-inch²/W (mm)	0.100 (0.47)	0.137 (0.934)	0.220 (1.874)
Thermal Conductivity[1]	W/mK	16	16	16
Operating Temperature Range	°C	- 50 to + 180	- 50 to + 180	- 50 to + 180
ELECTRICAL				
Volume Resistivity	Ohm - cm	< 50,000	< 50,000	< 50,000

Measurement technique according to: [1]ASTM D 5470. All data without warranty and subject to change. Please contact us for further data and information.
Shelf life adhesive: 6 months when stored in original packaging at room temperature and 50% relative humidity.

Thicknesses: 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)





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