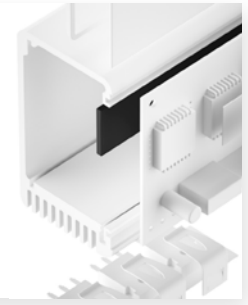


# SILICONE GAP FILLER PAD TEL-Z-SI

highly thermally conductive elastomer / Low Volatile Siloxanes (LV)



TEL-Z-SI is a non dielectric high performance thermally conductive LV 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 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.



Release 02 / 2021

### PROPERTIES

- High surface compliance and softness
- Low volatile siloxane content (LV)
- Non dielectric
- No paint wetting impairment
- Thermal conductivity: 50 W/mK (anisotropic)
- Extraordinary chemical resistance and longterm stability
- Shock absorbing

### AVAILABILITY

- Sheet 140 x 140 mm (TEL-ZXXXX-SI)
- Die cut parts
- Optional with adhesive stripes or dots (TEL-ZXXXX-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

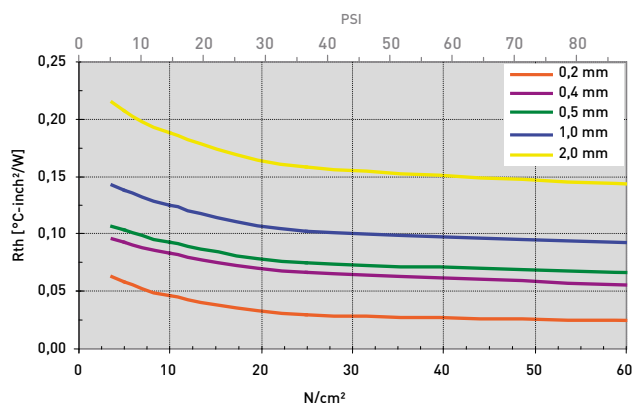
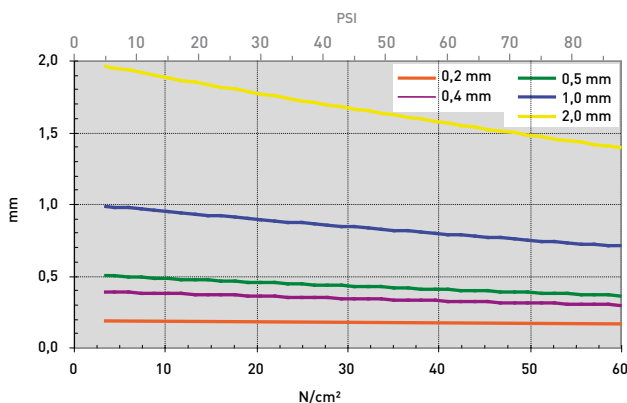
Technical Data Sheet

PROPERTY	UNIT	TEL-Z0200-SI	TEL-Z0500-SI	TEL-Z1000-SI
<b>MATERIAL</b>				
MATERIAL		Graphite filled silicone elastomere	Graphite filled silicone elastomere	Graphite filled silicone elastomere
Colour		Black	Black	Black
Thickness	mm	0.2 ±0.05	0.5 ±0.05	1.0 ±0.10
Hardness	Shore 00	75	75	75
No Paint Wetting Impairment Substances (PWIS) <sup>1</sup>		Passed	Passed	Passed
Flammability	UL 94	V0	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes
<b>THERMAL</b>				
Resistance <sup>2</sup> @ 90 PSI @ Thickness	°C-inch <sup>2</sup> /W (mm)	0.020 [0.16]	0.060 [0.33]	0.09 [0.70]
Resistance <sup>2</sup> @ 30 PSI @ Thickness	°C-inch <sup>2</sup> /W (mm)	0.027 [0.18]	0.075 [0.48]	0.11 [0.91]
Resistance <sup>2</sup> @ 10 PSI @ Thickness	°C-inch <sup>2</sup> /W (mm)	0.050 [0.19]	0.095 [0.49]	0.13 [0.97]
Thermal Conductivity	W/mK	50	50	50
Operating Temperature Range	°C	- 50 to + 180	- 50 to + 180	- 50 to + 180
<b>ELECTRICAL</b>				
Volume Resistivity	Ohm - cm	< 50.000	< 50.000	< 50.000

Measurement technique according to: <sup>1</sup>P-VW 3-10.7 57650 Temp. Test, <sup>2</sup>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: 0.2 mm / 0.4 mm / 0.5 mm / 1.0 mm / 2.0 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.