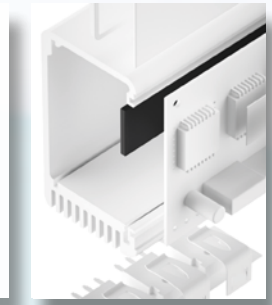


# SILICONE GAP FILLER TEL-Z-SI

highly thermally conductive elastomer



TEL-Z-SI is a non dielectric high performance 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 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 / 2018

### PROPERTIES

- High surface compliance and softness
- Non dielectric
- 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

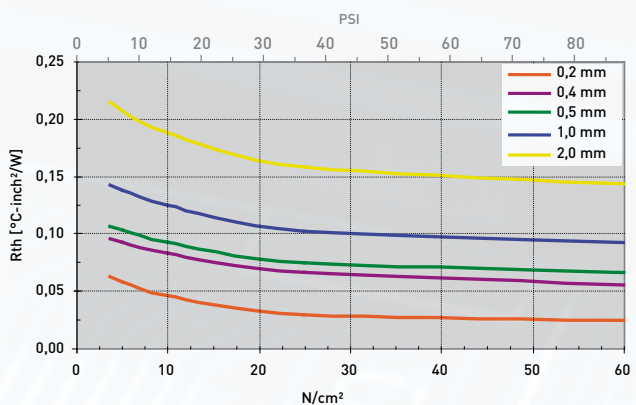
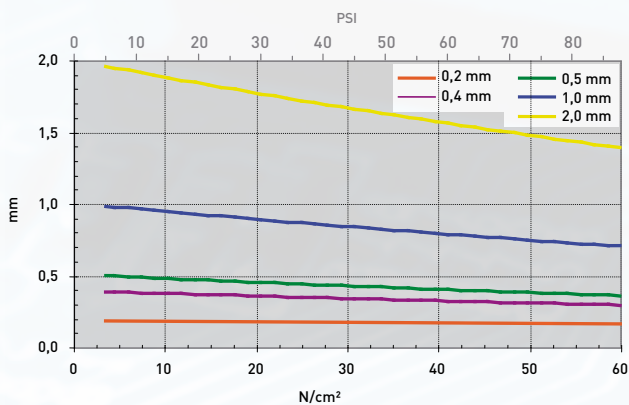
- Thermal link of:
- MOSFETs or IGBTs
  - Power diodes or AC/DC converters
  - Power modules
- For use in Switch mode power supplies / Motor control units / Automotive engine management systems / UPS units / Solar systems

Property	Unit	TEL-Z0200-SI	TEL-Z0500-SI	TEL-Z1000-SI
<b>Material</b>		Graphite filled silicone elastomere	Graphite filled silicone elastomere	Graphite filled silicone elastomere
Colour		Black	Black	Black
Thickness	mm	0.2	0.5	1.0
Hardness	Shore 00	65	65	65
Flammability	UL 94	V0	V0	V0
RoHS Conformity	2011 / 65 / EU	Yes	Yes	Yes
<b>Thermal</b>				
Resistance <sup>1</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>1</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>1</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	< 100	< 100	< 100

Measurement technique according to: <sup>1</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.