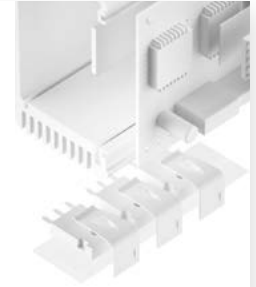


SILICONE FOIL TFO-R-SI

fibreglass reinforced



TFO-R-SI is an electrically insulating thermally conductive silicone foil for an optimised thermal coupling between electronic packages and heat sinks. Through the specific formulation and filling with thermally conductive ceramic particles a very high thermal conductivity is reached. Under pressure the total thermal resistance is minimised. The fibreglass reinforcement provides for an outstanding mechanic stability and cutthrough resistance as well as easy handling. For an easy and reliable pre-assembly the interface material is available with low tack pressure sensitive adhesive on one side.



Release 02 / 2023

PROPERTIES

- Thermal conductivity: 3.5 W/mK
- High thermal contact
- Outstanding mechanic stability through fibreglass reinforcement
- Extraordinary chemical resistance and longterm stability
- Residue-free removal after use

AVAILABILITY

- Sheet 300 x 280 mm
- Non tacky (TFO-RXXX-SI)
- Tacky on one side (TFO-RXXX-SI-A1)
- 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 / Automotive pre-heaters

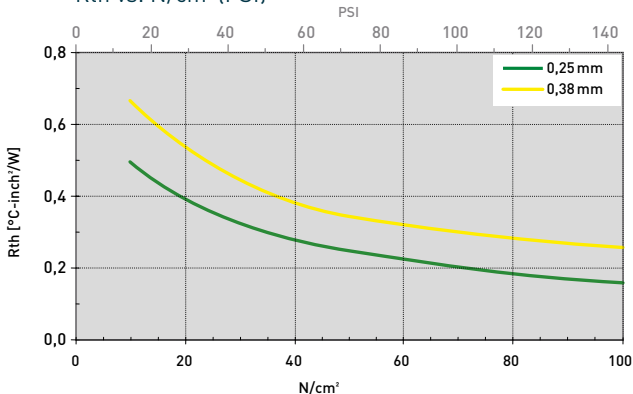
Technical Data Sheet

PROPERTY	UNIT	TFO-R250-SI	TFO-R380-SI
MATERIAL			
Colour		White	White
Reinforcement		Fibreglass	Fibreglass
Thickness	mm	0.25 ±0.03	0.38 ±0.03
Tensile Strength ¹	kpsi	> 2.18	> 2.18
Shelf Life (unopened, dry storage conditions @ < 40°C)	Months	12	12
UL Flammability	UL 94	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes
THERMAL			
Resistance ² @ 150 PSI	°C-inch ² /W	0.16	0.26
Resistance ² @ 30 PSI	°C-inch ² /W	0.41	0.55
Thermal Conductivity ²	W/mK	3.5	3.5
Operating Temperature Range	°C	- 40 to + 150	- 40 to + 150
ELECTRICAL			
Breakdown Voltage ³	kV AC	3.0	4.0
Volume Resistivity	Ohm - cm	1 x 10 ¹⁴	1 x 10 ¹⁴
Dielectric Constant	@ 1 MHz	2.4	2.4

Test Methods: ¹ ASTM D 412, ² ASTM D 5470, ³ ASTM D 149. All data without warranty and subject to change. Please contact us for further data and information.

Thicknesses: 0.25 mm / 0.38 mm

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.