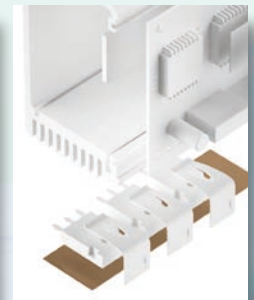


# SILICONE FOIL TFO-J-SI

fibreglass reinforced, highly dielectric



TFO-J-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 high thermal conductivity is reached. Under pressure the total thermal resistance is minimised. The material is characterised by its very high dielectric properties. The fibreglass reinforcement provides for an outstanding mechanic stability and cut-through 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.



## PROPERTIES

- Thermal conductivity: 2.0 W/mK
- High thermal contact
- Outstanding mechanic stability through fibreglass reinforcement
- Very high dielectric strength
- Extraordinary chemical resistance and longterm stability
- Residue-free removal after use

## AVAILABILITY

- Sheet
- Roll 300 mm x 50 m
- Non tacky
- Tacky on one side (TFO-JXXX-SI)
- Die cut parts
- Kiss cut parts on roll
- Kiss cut parts on sheet

## APPLICATION EXAMPLES

Thermal link of:

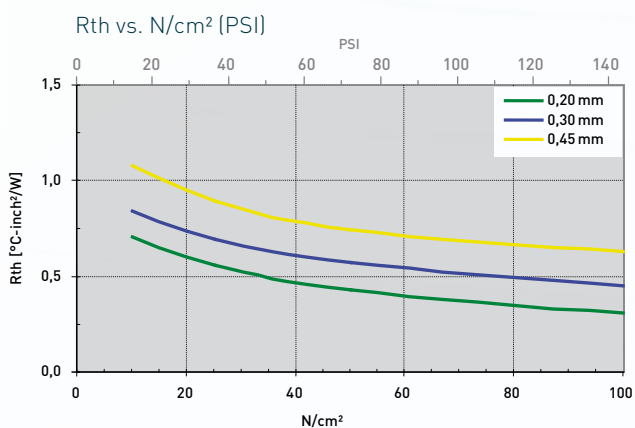
- MOSFETs or IGBTs
- Power diodes or AC/DC converters
- Power modules

For use in Switch mode power supplies / Motor control units / High voltage hybrid automotive applications / PS units / Solar systems

Property	Unit	TFO-J200-SI	TFO-J300-SI	TFO-J450-SI
<b>Material</b>		Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone
Colour		Dark Brown	Dark Brown	Dark Brown
Reinforcement		Fibreglass	Fibreglass	Fibreglass
Thickness	mm	0.20	0.30	0.45
Tensile Strength <sup>1</sup>	kpsi	5.6	4.0	2.9
UL Flammability	UL 94	V0	V0	V0
RoHS Conformity	2011 / 65 / EU	Yes	Yes	Yes
<b>Thermal</b>				
Resistance <sup>2</sup> @ 150 PSI	°C-inch <sup>2</sup> /W	0.31	0.45	0.63
Resistance <sup>2</sup> @ 30 PSI	°C-inch <sup>2</sup> /W	0.61	0.74	0.96
Thermal Conductivity	W/mK	2.0	2.0	2.0
Operating Temperature Range	°C	-40 to +180	-40 to +180	-40 to +180
<b>Electrical</b>				
Breakdown Voltage <sup>3</sup>	kV AC	5.5	> 6.0	> 6.0
Volume Resistivity	Ohm - cm	1.2 x 10 <sup>15</sup>	1.2 x 10 <sup>15</sup>	1.2 x 10 <sup>15</sup>

Measurement technique according to: <sup>1</sup> ASTM D 412, <sup>2</sup> ASTM D 5470, <sup>3</sup> ASTM D 149. 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: 0.20 mm / 0.30 mm / 0.45 mm



All technical data and information are without warranty and believed to be reliable and accurate. Since the final technical specifications of the product are subject to change, please refer to the latest version of the product specification sheet. The information in this document is for reference only and does not constitute a contract. HALA Contec GmbH & Co. KG reserves the right of changes.