fibreglass reinforced



TFO-ZS-SI is a high performance electrically insulating thermally conductive silicone foil for an optimised thermal coupling between electronic packages and heat sinks. Through the specific formulation and filling with highly thermally conductive ceramic particles an extremely high thermal conductivity is reached. Its conformal surface structure and flexibility guarantees a very good compliance to the contact surfaces. Thus the total thermal resistance is minimised. The fibreglass reinforcement provides for an outstanding mechanic stability and cutthrough resistance as well as easy handling.



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Technical Data Sheet

PROPERTIES

- ☐ Thermal conductivity: 8.0 W/mK
- High surface compliance and flexibility
- Excellent thermal contact
- Outstanding mechanic stability through fibreglass reinforcement
- Extraordinary chemical resistance and longterm stability
- Residue-free removal after use

AVAILABILITY

- ☐ Sheet 440 x 510 mm
- Non tacky (TF0-ZSXXXX-SI)
- Die cut parts

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	TF0-ZS0200-SI	TF0-ZS0300-SI	TFO-ZS0450-SI
MATERIAL		Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone
Colour		White	White	White
Reinforcement		Fibreglass	Fibreglass	Fibreglass
Thickness	mm	0.20 ±0.05	0.30 ±0.05	0.45 ^{±0.05}
Tensile Strength¹	kpsi	1.32	0.97	0.67
UL Flammability (Equivalent)	UL 94	VO	V0	VO
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes
THERMAL				
Resistance ² @ 150 PSI	°C-inch²/W	0.10	0.13	0.17
Resistance ² @ 30 PSI	°C-inch²/W	0.15	0.19	0.24
Thermal Conductivity ²	W/mK	8.0	8.0	8.0
Operating Temperature Range	°C	-40 to + 180	-40 to +180	-40 to + 180
ELECTRICAL				
Breakdown Voltage³	kV AC	3.6	4.5	5.0

Measurement technique according to: 'ASTM D 412, 'ASTM D 5470, 'ASTM D 149. All data without warranty and subject to change. Please contact us for further data and information.

Thicknesses: 0.20 mm / 0.30 mm / 0.45 mm

