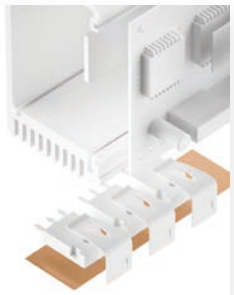
INSULATING FILM TFO-M-SI-PI

silicone coated, highly dielectric

TFO-M-SI-PI is an electrically insulating thermally conductive foil made of a high voltage resistant Polyimide film with thermally conductive silicone coating on both sides 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 material is characterised by its very high dielectric properties. The substrate film provides for an outstanding mechanic stability and cutthrough resistance as well as easy handling.



PROPERTIES

- High thermal contact
- Very high dielectric strength
- Outstanding mechanic stability through substrate film
- Extraordinary chemical resistance and longterm stability
- Residue-free removal after use

AVAILABILITY

- Sheet 320 x 400 mm
  Others on request
- Roll 320 mm x 50 m
- Non tacky
  (TFO-MXXX-SI-PI)
- Die cut parts

APPLICATION EXAMPLES

Thermal link of:

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

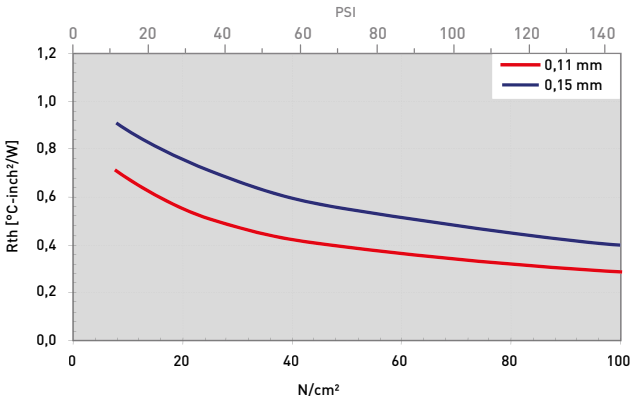
For use in Switch mode power supplies / Motor control units / Automotive engine management systems / UPS units / Solar systems

PROPERTY	UNIT	TFO-M110-SI-PI	TFO-M150-SI-PI
MATERIAL		Insulating film coated with ceramic filled silicone	Insulating film coated with ceramic filled silicone
Colour		Light brown	Light brown
Reinforcement		Polyimide film	Polyimide film
Thickness	mm	0.11 ±0.02	0.15 ±0.02
UL Flammability	UL 94	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes
THERMAL			
Resistance[1] @ 150 PSI	°C-inch²/W	0.29	0.40
Resistance[1] @ 30 PSI	°C-inch²/W	0.55	0.75
Operating Temperature Range	°C	- 40 to + 180	- 40 to + 180
ELECTRICAL			
Breakdown Voltage[2]	kV AC	6	> 6

Measurement technique according to: [1] ASTM D 5470, [2] ASTM D 149. All data without warranty and subject to change. Please contact us for further data and information.

Thickness: 0.11 / 0.15 mm

Rth vs. N/cm² (PSI)



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Technical Data Sheet