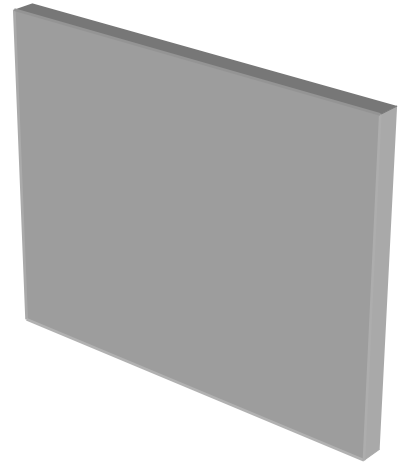


TM-TIF Thermally Conductive Gap Filler

TM-TIF 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 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

- Very good thermal contact
- Outstanding mechanic stability through fibreglass
- Extraordinary chemical resistance and longterm stability
- Residue-free removal after use

Availability

- Sheet of 300 mm x 1000 mm
- Roll with 300 mm width
- Non-tacky
- Tacky on one side
- 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
- Automotive engine management systems
- UPS units
- Solar systems

Technical Data

Part	TM-TIF200	TM-TIF300	TM-TIF450
Material	Ceramic filled silicone		
Colour	Gray		
Reinforcement	Fiberglass		
Thickness [mm]	0,2	0,3	0,45
UL Flammability [UL 94]	V 0	V 0	V 0
RoHS Conformity [2002/95/EC]	Yes	Yes	Yes
Thermal Resistance @150 PSI [$^{\circ}\text{C}\cdot\text{inch}^2/\text{W}$]	0,30	0,38	0,49
Thermal Resistance @30 PSI [$^{\circ}\text{C}\cdot\text{inch}^2/\text{W}$]	0,49	0,57	0,68
Thermal Conductivity [W/mK]	2,0	2,0	2,0
Operating Temperature Range [$^{\circ}\text{C}$]	-50 to +180	-50 to +180	-50 to +180
Breakdown Voltage [kV AC]	> 4 kV	> 6 kV	> 9kV
Volume Resistivity [Ohm-cm]	$>1,0 \times 10^{11}$	$>1,0 \times 10^{11}$	$>1,0 \times 10^{11}$
Dielectric Constant [@ 1MHz]	6,0	6,0	6,0

R_{th} vs. N/cm^2 (PSI)

