SILICONE FOIL

not reinforced

BT-L-SI

BT-L-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. Its conformal surface structure guarantees a very good compliance to the contact surfaces even at low pressure. Thus the total thermal resistance is minimised. The material can be applied in a broad field of applications.

PROPERTIES

- Thermal conductivity: 2.1 W/mK
- Very good surface compliance
- Very low thermal resistance
- Extraordinary chemical resistance and longterm stability
- Residue-free removal after use

AVAILABILITY

- Sheet 440 x 480 mm
- Non tacky (TFO-LXXX-SI)
- Die cut parts

APPLICATION EXAMPLES

Thermal link of:

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

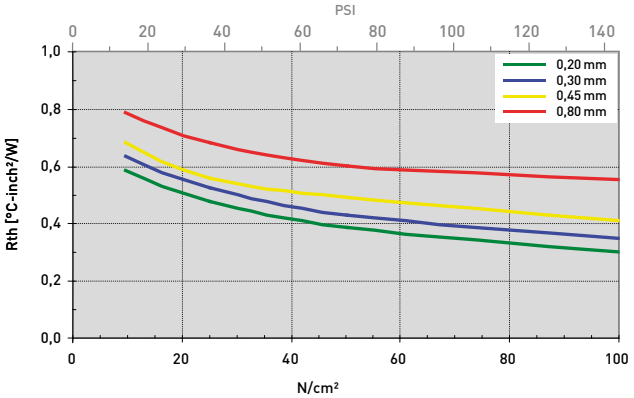
For use in Switch mode power supplies / Motor control units / Automotive engine management systems / UPS units / Solar systems

Property	Unit	BT-L200-SI	BT-L300-SI	BT-L450-SI	BT-L800-SI
Material		Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone
Colour		Grey	Grey	Grey	Grey
Reinforcement		None	None	None	None
Thickness	mm	0.20	0.30	0.45	0.80
Tensile Strength[1]	kpsi	0.45	0.45	0.45	0.45
UL Flammability	UL 94	VO	VO	VO	VO
RoHS Conformity	2011 / 65 / EU	Yes	Yes	Yes	Yes
Thermal					
Resistance[2] @ 1 MPa	°C-inch²/W	0.30	0.35	0.41	0.55
Resistance[2] @ 200 kPa	°C-inch²/W	0.50	0.56	0.59	0.71
Thermal Conductivity	W/mK	2.1	2.1	2.1	2.1
Operating Temperature Range	°C	- 50 to + 200	- 50 to + 200	- 50 to + 200	- 50 to + 200
Electrical					
Breakdown Voltage[3]	kV AC	3	5	8	9
Volume Resistivity	Ohm - cm	1.5×10^{13}	6.0×10^{13}	5.4×10^{13}	7.7×10^{13}
Dielectric Constant	@ 1 MHz	5.5	5.5	5.5	5.5

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: 0.20 mm / 0.30 mm / 0.45 mm / 0.80 mm

Rth vs. N/cm² (PSI)



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