SILICONE CAP TCP-L-SI

all around dielectric

HALA ⬛

TCP-L-SI is a thermally conductive silicone cap for an optimised thermal coupling between electronic packages and heat sinks which provides for a reliable electrical all-around insulation. Through the specific formulation and filling with thermally conductive ceramic particles a very high thermal conductivity is reached. Its conformal surface structure guarantees a very good compliance to the contact surfaces. Thus the total thermal resistance is minimised.

PROPERTIES
- Thermal conductivity: 2.0 W/mK
- Very good surface compliance
- High thermal contact
- Extraordinary chemical resistance and longterm stability
- Residue-free removal after use

AVAILABILITY
- Thicknesses:
  0.30 mm / 0.45 mm / 0.80 mm
- Different sizes available
  (See table Sizes)

APPLICATION EXAMPLES
Thermal link of:
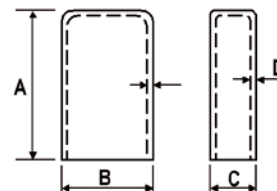- MOSFETs or IGBTs
- Power diodes or AC/DC converters
For use in Switch mode power supplies / Motor control units / Automotive engine management systems / UPS units / Solar systems

PROPERTY	UNIT	TCP-L300-SI	TCP-L450-SI	TCP-L800-CP
MATERIAL		Ceramic filled silicone	Ceramic filled silicone	Ceramic filled silicone
Colour		Brown	Brown	Brown
Thickness	mm	0.30	0.45	0.80
Tensile Strength	kpsi	0.44	0.44	0.44
Tear Strength	kN/m	6.0	6.0	6.0
UL Flammability	UL 94	V0	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes
THERMAL				
Resistance (@ TO-3P)	°C/W	0.4	0.6	1.1
Thermal Conductivity [1]	W/mK	2.0	2.0	2.0
Operating Temperature Range	°C	- 50 to + 200	- 50 to + 200	- 50 to + 200
ELECTRICAL				
Breakdown Voltage	kV AC	5	7	12
Volume Resistivity	Ohm - cm	3.5×10^{14}	3.5×10^{14}	3.5×10^{14}
Dielectric Constant	@ 1 MHz	6.2	6.2	6.2

Measurement technique according to: [1] ASTM E 1530. All data without warranty and subject to change. Please contact us for further data and information.

SIZES IN MM	A	B	C	D
TCP-L300-SI (für TO-220)	21.5 ±1.0	11.4 ±0.5	5.8 ±0.3	0.30 + 0.15 / -0.00
TCP-L300-SI (für TO-3P)	28.5 ±1.0	17.5 ±0.5	5.8 ±0.3	0.30 + 0.15 / -0.00
TCP-L450-SI (für TO-220)	21.5 ±1.0	11.4 ±0.5	5.8 ±0.3	0.45 + 0.10 / -0.05
TCP-L450-SI (für TO-3P)	28.5 ±1.0	17.5 ±0.5	5.9 ±0.3	0.45 + 0.10 / -0.05
TCP-L800-SI (für TO-220)	21.8 ±1.0	12.1 ±0.5	6.5 ±0.3	0.80 + 0.15 / -0.00
TCP-L800-SI (for TO-3P)	28.8 ±1.0	18.2 ±0.5	6.6 ±0.3	0.80 + 0.15 / -0.00