

SILICONE CAP TCP-L-SI

all around dielectric

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.



Release 09 / 2026

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:

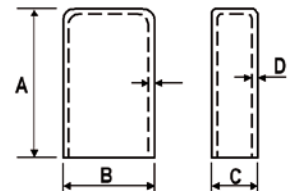
- ☐ MOSFETs or IGBTs
 - ☐ Power diodes or AC/DC converters
- For use in Switch mode power supplies / Motor control units / Automotive engine management systems / UPS units / Solar systems

Technical Data Sheet

PROPERTY	UNIT	TCP-L300-SI	TCP-L450-SI	TCP-L800-CP
MATERIAL				
Colour		Ceramic filled silicone Brown	Ceramic filled silicone Brown	Ceramic filled silicone 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 (@ T0-3P)	°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. Typical, non-binding values. Not intended for specification purposes. Subject to technical changes. Please contact us for further information.

SIZES IN MM	A	B	C	D
TCP-L300-SI (für T0-220)	21.5 ± 1.0	11.4 ± 0.5	5.8 ± 0.3	0.30 + 0.15 / - 0.00
TCP-L300-SI (für T0-3P)	28.5 ± 1.0	17.5 ± 0.5	5.8 ± 0.3	0.30 + 0.15 / - 0.00
TCP-L450-SI (für T0-220)	21.5 ± 1.0	11.4 ± 0.5	5.8 ± 0.3	0.45 + 0.10 / - 0.05
TCP-L450-SI (für T0-3P)	28.5 ± 1.0	17.5 ± 0.5	5.9 ± 0.3	0.45 + 0.10 / - 0.05
TCP-L800-SI (für T0-220)	21.8 ± 1.0	12.1 ± 0.5	6.5 ± 0.3	0.80 + 0.15 / - 0.00
TCP-L800-SI (for T0-3P)	28.8 ± 1.0	18.2 ± 0.5	6.6 ± 0.3	0.80 + 0.15 / - 0.00



All technical data and information are without warranty and believed to be reliable and accurate, corresponding to the latest state of the art. Since the products are not provided to conform with mutually agreed specifications and their use and processing are unknown we cannot guarantee results, freedom from patent infringement, or their suitability for any application. Product testing by the applicant is recommended. We reserve the right of changes.