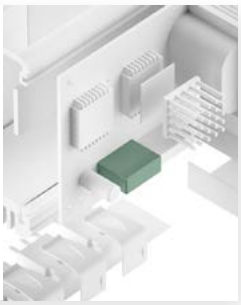
SILICONE CAP TCP-C-SI

all around dielectric

TCP-C-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 good 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

- Very good surface compliance
- High thermal contact
- Extraordinary chemical resistance and longterm stability
- Residue-free removal after use

AVAILABILITY

- Thicknesses: 0.5 mm and 0.8 mm
- Different sizes available

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-C250-SI	TCP-C280-SI
MATERIAL		Ceramic filled silicone	Ceramic filled silicone
Colour		Grey	Grey
Thickness	mm	0.50	0.80
Tensile Strength[1]	kpsi	0.5	0.5
Tear Strength	kN/m	6.0	6.0
UL Flammability	UL 94	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes
THERMAL			
Resistance @ 30 PSI	°C-inch²/W	0.48	0.58
Thermal Conductivity	W/mK	1.0	1.0
Operating Temperature Range	°C	- 40 to + 155	- 40 to + 155
ELECTRICAL			
Breakdown Voltage[2]	kV AC	4	10
Volume Resistivity	Ohm - cm	2.6×10^{15}	2.6×10^{15}
Dielectric Constant	@ 1 MHz	4.85	4.85

Measurement technique according to: [1] ASTM D 412, [2] ASTM D 149. All data without warranty and subject to change. Please contact us for further data and information.

SIZES IN MM	A	B	C	D
TCP-C150-SI	16.0 ±0.8	11.5 ±0.5	5.9 ±0.3	$0.5^{+0.15}_{-0.05}$
TCP-C250-SI	21.5 ±0.8	11.5 ±0.5	5.9 ±0.3	$0.5^{+0.15}_{-0.05}$
TCP-C280-SI	21.8 ±0.8	12.1 ±0.5	6.5 ±0.3	$0.8^{+0.15}_{-0.05}$
TCP-C450-SI	28.5 ±0.8	17.5 ±0.5	5.9 ±0.3	$0.5^{+0.15}_{-0.05}$
TCP-C480-SI	28.8 ±0.8	18.2 ±0.5	6.6 ±0.3	$0.8^{+0.15}_{-0.05}$