LiPOLY®
SHIU LI TECHNOLOGY CO.,LTD

CP-S

Thermal Conductive Rubber Cap

LiPOLY CP-S is a stereoscopic thermal conductive silicone rubber cap as substrate through a special production process. Due to its excellent characteristic of high thermal conductivity, insulation, shock-proof and convenient assembly, it is widely used in heat transistor refer to TO220 / TO3P, diode, triode.

FEATURES

/ Thermal conductivity: 2.5 W/m*K
/ Good insulator
/ High recovery
/ Easy to assemble
/ Available in a range of thicknesses

TYPICAL APPLICATION

/ Between CPU and heat sink
/ Between a component and heat sink
/ Notebook computers
/ Power supplies
/ High speed mass storage drives
/ Telecommunication hardware
/ 5G base station & infrastructure
/ EV electric vehicle

SPECIFICATIONS

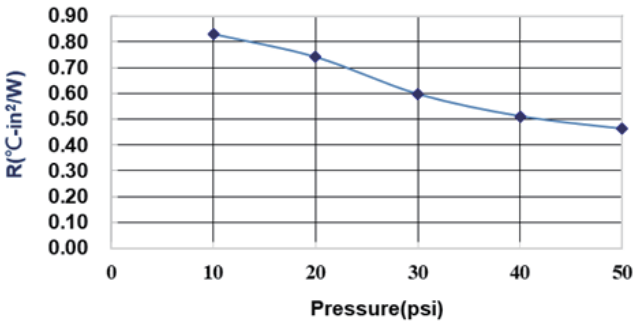
/ 11.4 x 16x5.8mm
/ 11.4 x 21.5x5.8mm
/ 17.5 x 28.5x5.8mm



TYPICAL PROPERTIES

PROPERTY	CP-S	TEST METHOD	UNIT
Color	Gray	Visual	-
Resin base	Silicone	-	-
Thickness	0.30 / 0.45	ASTM D374	mm
Density	2.3	ASTM D792	g/cm³
Hardness	65	ASTM D2240	Shore A
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	1	ASTM D5470 modify	%
Deflection @20 psi	2	ASTM D5470 modify	%
Deflection @30 psi	4	ASTM D5470 modify	%
Deflection @40 psi	5	ASTM D5470 modify	%
Deflection @50 psi	6	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	7 / 8	ASTM D149	KV/mm
Surface resistivity	$>10^{12}$	ASTM D257	Ohm
Volume resistivity	$>10^{13}$	ASTM D257	Ohm-m
THERMAL			
Thermal Conductivity	2.5	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.830	ASTM D5470	°C-in²/ W
Thermal impedance@20 psi	0.741	ASTM D5470	°C-in²/ W
Thermal impedance@30 psi	0.597	ASTM D5470	°C-in²/ W
Thermal impedance@40 psi	0.511	ASTM D5470	°C-in²/ W
Thermal impedance@50 psi	0.462	ASTM D5470	°C-in²/ W

Thermal Resistance vs. Pressure



Note: All specifications provided by LiPOLY are subject to change without notice. The test methods used by LiPOLY are based on the TIM Tester method and ASTM D5470 test method. These test methods are used as the definition standards for LiPOLY. Property values provided in this document are not for product specifications or guaranteed. This document does not guarantee the performance and quality required for the purchaser's specific purpose. The purchaser needs to evaluate and verify the safety before using the material. We strongly recommend the purchaser pre-test the product and verify the performance of the product under the purchaser's specific conditions. Liability and use of the product are the responsibility of the end user. LiPOLY makes no warranty as to the suitability, merchantability, or non-infringement of any LiPOLY material or product for any specific or general uses. LiPOLY shall not be liable for incidental orconsequential damages of any kind. All LiPOLY products are sold in accordance with the LiPOLY Terms and Conditions in effect at the time of purchase and a copy of which will be furnished upon request. All rights reserved, including LiPOLY trademarks or registered trademarks of LiPOLY or its affiliates. Statements concerning possible or suggested uses made herein shall not be relied upon or be constructed as a guaranty of patent infringement. Copyright 2023 LiPOLY.