

# SP-23

## Thermal Conductive Rubber Cap

LiPOLY SP-23 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 T0220 / T03P, diode, triode.

### ■ FEATURES

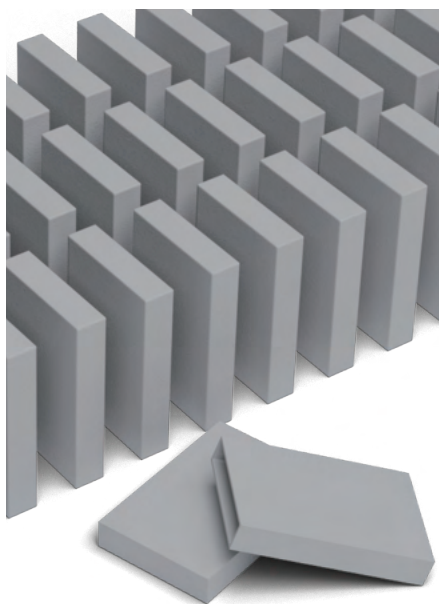
- / Thermal conductivity: 0.8 W/m\*K
- / Good insulator
- / High recovery
- / Easy to assemble
- / Available in a range of thicknesses

### ■ 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

- / 11.4mm x 16.0mm x 5.8mm
- / 11.4mm x 21.5mm x 5.8mm
- / 17.5mm x 28.5mm x 5.8mm



### ■ TYPICAL PROPERTIES

PROPERTY	SP-23	TEST METHOD	UNIT
Color	Gray	Visual	-
Resin base	Silicone	-	-
Thickness	0.30 / 0.45	ASTM D374	mm
Density	1.8	ASTM D792	g/cm <sup>3</sup>
Hardness	55	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	3	ASTM D5470 modify	%
Deflection @40 psi	4	ASTM D5470 modify	%
Deflection @50 psi	5	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	7 / 8	ASTM D149	KV
Surface resistivity	>10 <sup>12</sup>	ASTM D257	Ohm
Volume resistivity	>10 <sup>13</sup>	ASTM D257	Ohm-m
THERMAL@0.3mm			
Thermal conductivity	0.8	ASTM D5470	W/m*K
Thermal impedance@10 psi	1.110	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@20 psi	1.058	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@30 psi	0.988	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@40 psi	0.929	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@50 psi	0.897	ASTM D5470	°C-in <sup>2</sup> / W

### Thermal Resistance vs. Pressure

