

HC-93

Thermal Conductive Rubber Cap

LiPOLY HC-93 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 | HC-93 | TEST METHOD | UNIT |
|--------------------------|-------------------|-------------------|------------------------|
| Color | Gray | Visual | - |
| Resin base | Silicone | - | - |
| Thickness | 0.30 / 0.45 | ASTM D374 | mm |
| Density | 2.3 | ASTM D792 | g/cm ³ |
| 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-in ² / W |
| Thermal impedance@20 psi | 0.741 | ASTM D5470 | °C-in ² / W |
| Thermal impedance@30 psi | 0.597 | ASTM D5470 | °C-in ² / W |
| Thermal impedance@40 psi | 0.511 | ASTM D5470 | °C-in ² / W |
| Thermal impedance@50 psi | 0.462 | ASTM D5470 | °C-in ² / W |

Thermal Resistance vs. Pressure

