

# CP Series Thermal Insulation Rubber Cap

## Features

- Low thermal contact impedance and buffer effect
- Good electrical insulation
- Decrease the weight of the product
- Easy to assemble

## Application:

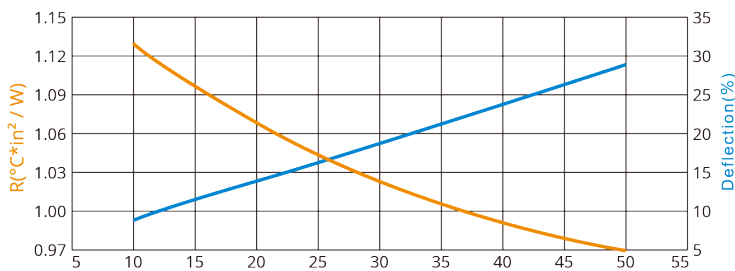
Electronic Components - 5G, Aerospace, AI, AIoT, AR/VR/MR/XR, Automotive, Consumer Devices, Datacom, Electric Vehicle, Electronic Products, Energy Storage, Industrial, Lighting Equipment, Medical, Military, Netcom, Panel, Power Electronics, Robot, Servers, Smart Home, Telecom, etc.

## Standard Sizes (mm):

1. CP22 TO-220: 11.4x16x5.8
2. CP23 TO-220: 11.4x21.5x5.8
3. CP33 TO-247: 17.5x28.5x5.8

## Properties

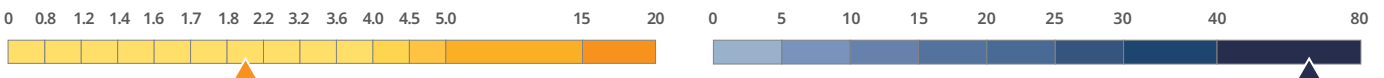
Contact Pressure, Thermal Impedance, and Deflection



| Contact Pressure (psi) | Thermal Impedance (°C*in²/W) | Deflection (%) |
|------------------------|------------------------------|----------------|
| 10                     | 1.13                         | 9              |
| 20                     | 1.07                         | 14             |
| 50                     | 0.97                         | 29             |

Thermal Conductivity : 2 W/mK

Hardness : 65 (Shore A)



| Properties                        | Unit       | CP22/CP23/CP33 | Tolerance | Test Method         |
|-----------------------------------|------------|----------------|-----------|---------------------|
| Thermal Conductivity              | W/m•K      | 2              | ±10%      | ASTM D5470 Modified |
| Thickness                         | mm         | 0.3/0.45       | -         | ASTM D374           |
| Color                             | -          | Gray           | -         | -                   |
| Material                          | -          | Silicone       | -         | -                   |
| Operating Temperature             | °C         | -45~+180       | -         | -                   |
| Density                           | g/cm³      | 2.55           | ±5%       | ASTM D792           |
| Dielectric Breakdown Voltage (AC) | KV         | ≥4.1/≥6.1      | -         | ASTM D149           |
| Dielectric Breakdown Voltage (DC) | KV         | ≥6.1/≥8.1      | -         | ASTM D149           |
| Dielectric Constant               | 1000Hz     | 5.8            | -         | ASTM D150           |
| Thermal Impedance@10psi           | °C*in² / W | 1.13           | -         | ASTM D5470 Modified |
| Thermal Impedance@20psi           | °C*in² / W | 1.07           | -         | ASTM D5470 Modified |
| Thermal Impedance@50psi           | °C*in² / W | 0.97           | -         | ASTM D5470 Modified |
| Hardness                          | Shore A    | 65             | ±7        | ASTM D2240          |

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