

TH994LH

Soft Silicone Thermal Pad

Description

TH994LH is a light grey colored, both side tacky silicone based thermal pad, suitable for use as thermal interface material to dissipate the heat from electronic devices, especially in integrated circuit (IC) and LEDs packaging. This thermal pad has low hardness and flexible, and yet provides very high thermal conductivity, good high temperature resistance and good electrical insulation.

Features

- High thermal conductivity
- Low hardness
- Low outgassing
- Flame retardant

Applications

Thermal conductive interface material for electronic parts and devices.

| Cured Properties | Typical Value | Unit | Test Method |
|-----------------------------|------------------------|---------------------|---------------|
| Color | Grey | - | PEN 10 |
| Surface tackiness | Natural tack | - | PEN 10 |
| Density | 3.3 | g/cm ³ | PEN 14 |
| Hardness, shore OO | 67 | - | ASTM D2240 |
| Hardness, Shore A | 16 | - | ASTM D2240 |
| Thermal conductivity | 6.0 | W/mK | ASTM D5470 |
| Thermal resistance | 2.8 | Kcm ² /W | ASTM D5470 |
| Tensile strength | 1.1 | kgf/cm ² | ASTM D412-98a |
| Elongation at break | 6.5 | % | ASTM D412-98a |
| Breakdown voltage | 11.06 | kV | PEN 60 |
| Dielectric strength | 20.8 | kV/mm | PEN 60 |
| Volume resistivity | 2.3 x 10 ¹¹ | Ohm-cm | PEN 65 |
| Operating temperature | -40 to 200 | °C | PEN 92 |
| Volatile content, 30-150° C | 0.08 | % | PEN 92 |
| Bleed test, 100° C/100hrs | <1.0 | mm | PEN 129 |
| Flammability | V-0 | - | PEN 55 |

^{*} The values above are tested based on batch to batch basis. These values are not use as a basis for preparing specifications.

Guideline of Use

- 1. Pick up silicone thermal pad from release film gently
- 2. Make sure the surface of the substrate is clean and dried before apply the silicone thermal pad
- 3. Position the silicone thermal pad to substrate
- 4. The silicone thermal pad can be applied and removed easily (care must be taken during installation to avoid tearing and contamination).

Storage & Shelf Life

Store the silicone thermal pad in a dried place. Avoid prolong exposure to sunlight.

Shelf life: 12 months

Product Dimension

Thickness range: 0.5 to 2.0mm

Other product dimension enquiry, please contact our sales department.

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^{*} PEN is referring to Penchem standard test method, ASTM is for Test reference only.

^{*} Specimen dimension for thermal conductivity and thermal resistance measurement = 1.0mm thickness, diameter = 3.3cm, contact pressure = 100kPa

^{*} Specimen dimension for tensile and elongation at break test - 10cm length x 1cm width x 0.5mm thick

^{*} PEN 55 – UL94 as reference test method



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Environment, Health & Safety

This product is intended for industrial use only. For more safety information, please refer to Product Safety Data Sheet (SDS).

General Information

All right reserved. This information in this document is subjected to change without notice.

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