Liquid Gap Filler Thermal Gel CTLCF500

CTLCF500 Two component thermal gel is a preformed thermal gap filling material, which can be solidified at room temperature or high temperature to form a flexible and thermally conductive elastomer, which is formed with the shape of the structure. After curing, it is equivalent to the thermal conductive silicone gasket. It mainly meets the requirements of low pressure and high compression modulus. It can realize automatic dispensing production with high efficiency. It has good contact with electronic products, increases effective contact area and reduces contact thermal resistance. It can automatically fill the gap and compress infinitely. It is suitable for heat dissipation modules or electronic components with large thickness variation.



Product Features

- High thermal conductivity, low thermal resistance, good wettability.
- Lower assembly stress, easy to operate.
- High reliability, after curing, it is equivalent to thermal pad, no volatilization.
- Automatic dispensing adjustment of any thickness.
- After curing, the modulus is low, which greatly reduces the stress caused by thermal expansion and the damage caused by vibration.

Typical Applications

- Network terminal /5G mobile phone communication.
- New energy battery.
- Automotive electronic application equipment.
- Electronic medical / power equipment.
- Between fragile components and housing.

Electrically Insulating, Thermally Conductive Elastomeric Material

| TYPICAL PRO | PERTIES OF T | THERMAL GEL | CTLCF500 |
|------------------------|------------------------|--------------------|---------------|
| Test Item | Unit | CTLCF500 | Test Method |
| Colour A/B | - | White+Gray | Visually |
| Extrusion Rate | g/min | 20 | 90psi@φ1.85mm |
| Mixing Ratio | - | 1:1 | ASTM D149 |
| Hardness | Shore AO | 20±5 | GB/T531 |
| | Shore OO | 50±10 | ASTM D2240 |
| Specific Gravity | g/cm³ | 3.20 | ASTM D792 |
| Breakdown Voltage | KV/mm | ≥7 | ASTM D149 |
| Volume Resistivity | Ω·cm | 1x10 ¹¹ | ASTM D257 |
| Weight Loss | % | ≤0.3 | @150°C240H |
| Continuous Use Temp | $^{\circ}\!\mathbb{C}$ | -40~150 | - |
| Flame Rating | - | V-0 | UL 94 |
| Surface Dry Time | Min | 45 | ASTM C679 |
| Thermal Conductivity | W/mk | 5.0±0.3 | ISO 22007 |
| Thermal Conductivity | W/mk | 5.0±0.3 | ASTM D5470 |
| Thermal impedance | °C∙in²/W | 0.332 | ASTM D5470 |
| Thermal impedance | °C·cm²/W | 2.141 | ASTM D5470 |
| Specific Heat Capacity | J/g/k | 0.845 | ASTM E1269 |

Configurations Available:

50ml, 400ml, barrel

Build a Part Number Standard Options



Note: The material can be customized. If you can't find the material that meets your requirements in our existing materials, you can consult the sales manager whether the material you need supports customization, and we will give you a reply within 24H.

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