



TG-V838 Phase Change Materials

REACH Compliant RoHS Compliant

Features

- · Good flow rate over phase change temperature
- · Fully filled the gaps of contact surface
- · Low thermal impedance

Applications

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.

Properties

Thermal Conductivity: 3.8 W/m·K



| Properties | Unit | TG-V838 | Tolerance | Test Method |
|------------------------------|-----------|--------------------|-----------|---------------------|
| Thermal Conductivity | W/m·K | 3.8 | ±10% | ASTM D5470 Modified |
| Thickness | mm | 0.13 | - | ASTM D374 |
| | inch | 0.005 | - | ASTM D374 |
| Color | - | Gray | - | - |
| Phase Transition Temperature | ° C | 50 | - | - |
| Breakdown Voltage (AC) | kV | ≥1 | - | ASTM D149 |
| Density | g/cm³ | 2.5 | ±0.3 | ASTM D792 |
| Operating Temperature | ° C | -40~+125 | - | - |
| Volume Resistivity | Ohm∙m | 3×10 ¹⁰ | - | ASTM D257 |
| Thermal Impedance @10psi | °C *in²/W | 0.546 | - | ASTM D5470 Modified |
| Thermal Impedance @30psi | °C *in²/W | 0.487 | - | ASTM D5470 Modified |
| Thermal Impedance @50psi | °C *in²/W | 0.454 | - | ASTM D5470 Modified |
| Dielectric Constant @1MHz | - | 13.3 | - | ASTM D150 |

※Die-cut for different shapes

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NOTICE: The information contained herein is to the best of our knowledge true and accurate. Values stated in this technical data sheet represent typical values as not all tests are run on each lot of material