High Performance Non Silicone Thermal Pad 8.0 W/MK Thermally Conductive Material

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: zhonglei
- Minimum Order Quantity: 100 m²
- Packaging Details: carton
- Supply Ability: 10000

Product Specification

- Adhesion Strength: Strong
- Tensile Strength: 10 Psi
- Flame Retardant: Yes
- Chemical Resistance: Excellent
- Thermal Conductivity: 8 W/mK
- Color: Grey
- Thickness: 0.5~5mm
- Density: 3.2G / Cbm
- Highlight: **Non Silicone Thermal Pad 8.0 W/mK**, **High Performance Non Silicone Thermal Pad**, **Non Silicone Thermally Conductive Material**

Product Description

Product Description:

The thermally conductive material in discussion is an innovative and high-performance solution designed to address the critical need for heat management in a wide array of electronic and industrial applications. This thermally conductive compound is specifically engineered to provide a highly efficient thermal path between heat-producing components and heat sinks or other cooling devices. With its distinctive grey color, this product is not only functional but also maintains a professional aesthetic compatible with a variety of design specifications. Made from a silicone base, this thermal conductivity material is tailored for durability and flexibility, ensuring a long-lasting bond that can withstand a variety of environmental conditions. Silicone as a material choice brings with it inherent resistance to moisture, UV, and ozone, making the compound suitable for both indoor and outdoor applications. This resilience is crucial in maintaining the integrity of the thermal interface over the operational lifespan of the device or machinery.

The application method of this thermally conductive compound is designed for user convenience, accommodating either dispensing or brushing techniques. This versatility in application ensures that the product can be applied with precision to a variety of component shapes and sizes, thus ensuring optimal thermal transfer. The ease of application is further enhanced by the material's consistency, which is engineered to facilitate smooth and even spreading without the need for excessive pressure or specialized equipment.

Operating within a temperature range of -40°C to 125°C, this thermally conductive silicone material offers exceptional performance stability under extreme conditions. This wide operating temperature range ensures that the compound will maintain its thermal conducting properties and structural integrity even in harsh environments, making it an ideal choice for applications subjected to rapid temperature changes or prolonged exposure to high temperatures.

The thickness of the compound is a crucial factor in its thermal performance, and with a thickness of0.5~5mm, the material is designed to fill even the smallest gaps and irregularities between interfaces. This thin yet effective layer is key to minimizing thermal resistance and maximizing heat dissipation. By ensuring that this critical thickness parameter is met, the thermal conductivity material is able to perform at its best, providing a reliable solution for managing heat generation in electronic components and other devices.

Overall, this thermally conductive material stands as a superior thermally conductive compound that excels in a variety of applications. Its grey color, silicone base, and versatile application methods, combined with its wide operating temperature range and precisely engineered thickness, make it a top contender in the market for thermal management solutions. Whether for use in consumer electronics, automotive, aerospace, or industrial machinery, this thermal conductivity material is designed to meet the most rigorous thermal challenges, ensuring devices operate within safe temperature ranges and maintain optimal performance.

Features:

Product Name: Thermally Conductive Material
Density: 3.2 G/Cbm
Thickness Tolerance: ±0.001” (±0.025mm)
Thickness: 0.5~5mm
Thermal Conductivity: 8 W/mK
Also known as Thermal Conduction Material
Efficient Thermal Transmission Material
High-performance Thermal Conductive Compound

Technical Parameters:

Parameter	Value
Chemical Resistance	Excellent
Operating Temperature Range	-40°C To 125°C
Thickness Tolerance	±0.001” (±0.025mm)
Color	Grey
Thickness	0.5~5mm
Dielectric Strength	10KV/mm
Density	3.2G/Cbm

Applications:

The zhonglei brand, hailing from China, has established a strong reputation in the field of thermal management solutions with its innovative Thermal Conduction Material. This thermally conductive product is specifically designed to meet the demanding requirements of a wide array of applications where efficient heat dissipation is critical. With a hardness of 50 Shore A, the zhonglei Thermal Conductive Adhesive ensures a perfect balance between flexibility and durability, enabling its application in scenarios that demand both the robustness to withstand mechanical stresses and the suppleness to conform to uneven surfaces.

One of the key attributes of the zhonglei Thermal Conduction Material is its exceptional adhesion strength. This characteristic ensures that once applied, the material creates a strong and enduring bond between surfaces, which is essential for reliable long-term thermal management. The strong adhesive quality of the product makes it particularly suitable for use in electronic devices where components must remain securely attached to heat sinks or other cooling apparatus, even in the face of vibration or thermal cycling.

With a nominal thickness of 0.5~5mmand a thickness tolerance of ±0.001” (±0.025mm), this grey-colored product can be used in precision-engineered scenarios where space is at a premium and exacting standards are the norm. The accurate thickness tolerance ensures uniform thermal performance across the entire surface area where the thermal conductive material is applied, which is vital in

high-performance electronics such as CPUs, GPUs, and power converters.
The versatility of the zhonglei thermal conductive product is further highlighted by its ability to function effectively across multiple industries. In the automotive sector, for example, the material can be deployed within engine control units (ECUs) or LED lighting systems to manage heat efficiently, thus preventing overheating and ensuring the longevity of the components. In the realm of consumer electronics, smartphones, tablets, and laptops benefit from the thermal management properties of the zhonglei adhesive to keep devices cool during intense operation.
Furthermore, the aerospace and defense industries can utilize this Thermal Conductive Adhesive in the most demanding environments. The robustness of the zhonglei product means that it can withstand the extremes of temperature and pressure found in aerospace applications, providing consistent thermal conduction and contributing to the reliability of critical systems. In renewable energy systems, such as solar inverters, the thermal conductive material plays an essential role in maintaining optimal operating temperatures, thereby enhancing efficiency and reducing the risk of failure.
In conclusion, the zhonglei Thermal Conduction Material, with its strong adhesion, optimal hardness, precise thickness, and thermal conduction properties, is an ideal choice for a multitude of applications where heat management is paramount. From the tight confines of consumer electronics to the expansive and rigorous demands of aerospace applications, this product from China stands out as a reliable and effective solution to thermal challenges across various industries.

Customization:

Brand Name: zhonglei
Place of Origin: China
Tensile Strength: 10 Psi
Dielectric Strength: 10 KV/mm
Chemical Resistance: Excellent
Density: 3.2G / Cbm
Our zhonglei brand thermal conductivity material is engineered to facilitate superior heat transfer. This thermally conductive material boasts a high tensile strength of 48 Psi and a dielectric strength of 10 KV/mm, making it an excellent choice for applications requiring both thermal management and electrical insulation. The chemical resistance is excellent, ensuring durability and long-term performance. Whether you require heat conductive substance for dispensing or brushing applications, our product can be tailored to fit your needs. With a density of 3.2G / Cbm, this thermal conduction material is designed for efficiency and manufactured in China, delivering both quality and reliability in thermal management solutions.

Support and Services:

Our Thermally Conductive Material products are designed to offer superior thermal management solutions for a variety of applications. We are committed to providing exceptional technical support and services to ensure that our products meet your needs and exceed your expectations.
Technical Support:
Our team of experienced engineers is available to assist you with product selection, design integration, and performance optimization. They can provide guidance on the best practices for using our thermally conductive materials in your specific application to achieve maximum effectiveness and efficiency.
Documentation and Resources:
We provide comprehensive documentation for our products, including datasheets, material safety data sheets (MSDS), and application notes. These resources are designed to give you a deep understanding of the material properties, handling instructions, and technical specifications.
Custom Solutions:
If our standard product offerings do not perfectly match your requirements, our technical team can work with you to develop custom solutions tailored to your unique application. We have the capability to customize the form factor, thermal conductivity, and other key properties of our materials.
Quality Assurance:
Our thermally conductive materials undergo rigorous testing to ensure they meet strict quality standards. We stand behind the quality of our products with a comprehensive warranty and are dedicated to resolving any quality issues swiftly and effectively.
After-Sales Support:
Our commitment to our customers extends beyond the initial purchase. We offer ongoing support to address any questions or concerns that may arise during the use of our products. Our goal is to ensure your continued satisfaction and success with our thermally conductive materials.

Packing and Shipping:

Product Packaging for Thermally Conductive Material:
Our thermally conductive materials are securely packaged to ensure they maintain their integrity and performance during transit. Each product is enclosed in anti-static packaging to prevent electrostatic discharge that could damage the material's properties. The packaging is also resistant to humidity and temperature variations, providing additional protection against environmental factors. To prevent physical damage, the materials are cushioned with shock-absorbent foam and placed in sturdy, corrugated cardboard boxes that are sealed and labeled according to industry standards.
Shipping of Thermally Conductive Material:
Shipping of our thermally conductive materials is carried out with utmost care to ensure that your product arrives in perfect condition. We use trusted courier services that specialize in the handling and transportation of sensitive components. All shipments are tracked, and we provide you with a tracking number so you can monitor the progress of your delivery. The materials are shipped with a 'Handle with Care' notice to ensure they are treated delicately throughout transit. In the event of any special shipping requirements or expedited delivery requests, please contact our customer service team to make arrangements tailored to your needs.

FAQ:

Q1: What types of thermally conductive materials does zhonglei offer?
A1: zhonglei offers a variety of thermally conductive materials, including thermal pastes, pads, tapes, and adhesives. Each product is designed to facilitate efficient thermal transfer in various applications such as electronics, automotive, and industrial equipment.
Q2: Can zhonglei's thermally conductive materials be customized?
A2: Yes, zhonglei provides customization options for their thermally conductive materials. Depending on your specific application requirements, you can request custom sizes, shapes, and thermal conductivity specifications. Contact zhonglei's customer service to

discuss your needs.

Q3: How do I apply zhonglei's thermal paste to my device?

A3: To apply zhonglei's thermal paste, first ensure that the surfaces are clean and free of debris. Apply a small amount of paste onto the surface, then spread it evenly with a tool like a spatula or card. The layer should be thin to maximize thermal conductivity. Finally, assemble the components by applying pressure to ensure good contact.

Q4: What is the thermal conductivity range of zhonglei's thermally conductive materials?

A4: The thermal conductivity of zhonglei's materials varies depending on the product type and formulation. They offer materials with a wide range of conductivity to meet different thermal management needs. For specific values, please refer to the technical datasheets or contact their customer service for more information.

Q5: Are zhonglei's thermally conductive materials safe to use and environmentally friendly?

A5: zhonglei is committed to safety and environmental sustainability. Their thermally conductive materials are designed to be safe for users and are manufactured in compliance with environmental regulations. Please consult the material safety data sheets (MSDS) for detailed information on handling and disposal.

Shanghai Zhonglei Electric Material Co., Ltd.

+8615702120966 forwardyu@163.com siliconerubber-product.com

No. 66, Lane 1098, Shengli Road, Qingpu District, Shanghai