Product HN200-31 :THERMAL COMPOUND

PRODUCT DESCRIPTION

1. Thermal conductivity >2.0 W/m·K with excellent temperature resistance, oil separation resistance, and spreadability. Suitable for medium-to-high temperature heat sources with high cost performance.
2. High thermal conductivity insulating silicone material, usable in ambient and operating temperatures ranging from -40°C to +200°C.
3. Possesses excellent electrical insulation and thermal conductivity, along with low free content (approaching zero). Resistant to high and low temperatures, water, ozone, and weathering. Offers good stability during use, low consistency, and excellent application properties. Safe, non-toxic, odorless, non-corrosive, and complies with ROHS 2.0 standards.

APPLICATION

Widely applied at the interface between heat sources (power transistors, thyristors, thermopiles, etc.) and heat dissipation components (heat sinks, heat spreaders, housings, etc.) in various electronic products and electrical equipment. Acts as a thermal transfer medium and provides moisture-proof, dust-proof, corrosion-resistant, and shock-resistant properties.

Suitable for surface coating or potting of various microwave components such as microwave communication devices, microwave transmission equipment, microwave-specific power supplies, and regulated power supplies.

Provides excellent thermal conduction for heat-generating electronic components, such as: transistors, CPU assemblies, thermistors, temperature sensors, automotive electronic parts, car refrigerators, power modules, printer heads, etc. Various applications requiring heat dissipation and transfer, such as LED lighting heat dissipation interfaces, power modules, and electrical components.

PRODUCT PROPERTIES

Appearance	White, Grey Paste
Thermal Conductivity (W/m·K)	2.05 ± 0.1
Thermal Impedance (°C·cm²/W)	0.82
Specific Gravity (g/cm³)	3.04 ± 0.08
Oil Separation (200°C, 24h)	≤0.5%
Volatiles (200°C, 24h)	≤0.8%
Cone Penetration (1/10mm, 25°C)	300±20
Dielectric Strength (0.20mm thick) (V/mm)	2680

DIRECTIONS FOR USE

1. The product has good application properties and can be applied directly. Application methods include brush application, roller coating, automatic dispensing machine extrusion, or screen printing.
2. Thoroughly clean all contact surfaces with solvent before applying the grease. Ensure the gap is filled while applying as thin a layer as possible. Applying too much is not beneficial and can negatively impact thermal transfer efficiency.
3. Use clean tools (e.g., razor blade, credit card edge, or clean knife) to transfer a small amount of thermal grease to the application area. Spread evenly using a scraper, then wipe away excess grease around the edges with a lint-free cloth.

STORAGE

1. Store in a cool, dry place away from direct sunlight. Recommended storage temperature below 27°C.
2. Shelf life: 12 months when unopened and properly sealed.
3. During storage, minor silicone oil separation may occur. This is normal and does not affect performance. If necessary, stir well before use.

Conversions

(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm^2 x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

NOTE

Theabove information and data are obtained from our extensive experiments and are reliable. Due to the diversity of practical applications and conditions beyond our control, users must conduct tests prior to use to confirm suitability for their specific application. We do not guarantee against problems arising from the use of our products under specific conditions and assume no responsibility for any direct, indirect, or consequential losses. For any issues encountered during use, please contact our Technology Service department, and we will endeavor to provide all possible assistance.