

Product TC-30X :THERMAL COMPOUND

PRODUCT DESCRIPTION

TC-30X is recommended for high-temperature heat transfer in normal applications. It is used between heat generating devices and the surfaces to which they are mounted or other heat dissipating surfaces. This product delivers excellent thermal resistance, offers high thermal conductivity and virtually no evaporation over a wide operating temperature range. It is nonflammable oil based compound which is oxidation resistant and does not promote rust or corrosion.

APPLICATION

This product is widely used in the area requires heat transfer:

- 1) Electronic product application: Induction cooker, refrigerator, drinking fountain, electric water heater, TV etc.
- 2) Electrical Products : Power switch, relay, transducer, silicon-controlled rectifier, etc.
- 3) Microelectronics products : CPU, graphics card, LCD, radiator, projector.
- 4) Other products: Communication equipment, LED, Power supply cooling module, conductor.

PRODUCT PROPERTIES

| | |
|--|---|
| Technology | Silicone grease |
| Appearance | Grey paste |
| Application | Thermal management |
| Typical Assembly Applications | CPUs, GPUs, MCUs, ASICs, DC-DC converters, IGBT and Transistors |
| Operating Temperature | -40 to 150 °C |
| <u>Viscosity, Cone & Plate, mPa·s (cP):</u> | |
| Temperature: 25 °C, Shear Rate: 0.5 s ⁻¹ | 350,000 |
| Specific Gravity @ 25 °C | 1.94 |
| Thermal Conductivity, W/mk | 3 |
| Thermal Impedance ASTM-D-5470, °C.in ² /W: 80ps | 0.017 |

DIRECTIONS FOR USE

1. For best results parts to be covered should be clean and free of oil and debris.
2. Apply appropriate material to substrate so that there is enough material to cover 100% of the surface between the component and the heat sink and the material leaves a small fillet.
3. Place the heat sink on top of the component and secure with clips, screws or other hardware.

STORAGE

Store product in the unopened container in a dry location.

Optimal Storage: 5°C to 30°C. Storage below 5°C or greater than 30°C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Endotherm cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

Conversions

$$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$$

$$\text{kV/mm} \times 25.4 = \text{V/mil}$$

$$\text{mm} / 25.4 = \text{inches}$$

$$\text{N} \times 0.225 = \text{lb}$$

$$\text{N/mm} \times 5.71 = \text{lb/in}$$

$$\text{N/mm}^2 \times 145 = \text{psi}$$

$$\text{MPa} \times 145 = \text{psi}$$

$$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$$

$$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$$

$$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$$

$$\text{mPa}\cdot\text{s} = \text{cP}$$

NOTE

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Endotherm specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Endotherm's products. Endotherm specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.