

Technical Data Sheet

TIM4101-7.0

Thermal Gap Filler Insulating Pad

Thermal gap filler has excellent flexibility insulation, compressibility and natural surface viscosity performances. It used to fill the gap and realize the heat transfer between the heating parts and cooling parts. It also has insulation and shock mitigation effects Meanwhile, it can satisfy the design requirements for minitype and ultra-thin equipments with excellent manufacturability and practicability. With wide range of thickness, it is widely used in electronic products.

FEATURE

- · Being able to work under low pressure
- Low thermal resistance
- Being recognized as UL94 V-0
- Viscous surface
- Excellent insulation performance and thermal resistance

APPLICATIONS

- Between chip and heat-dissipation modules
- Optoelectronic Industry
- Netcom products
- New energy battery and vehicles industry
- Household appliances
- Wearable equipments

This series of products are environmentally compliantwith RoHS 2.0, halogen, and REACH standards

STORAGE CONDITIONS: Storage in the darkness

STORAGE TEMPERATURE: ≤ 30 °C

STORAGE HUMIDITY:≤ 70%

The height of the stacking should not be more than 7 layers and the total height should not be more than 1m.

SHELF LIFE:

Under storage conditions: 2 year

PROPERTIES

| Item | Parameter | Unit | Test Method |
|--------------------------|-----------------|---------|--------------------|
| Color | Gray | - | Visual |
| Thickness Range | 0.3 ~ 5 | mm | ASTM D 374 |
| Hardness | 35 | Shore C | ASTM D 2240 |
| Density | 3.25 | g/cc | ASTM D 792 |
| Tensile Strength | ≥0.1 | Мра | ASTM D 412 |
| Elongation | ≥45 | % | ASTM D 412 |
| Compression Ratio | ≥15 (@50Psi) | % | ASTM D 575 |
| UL Certification | V-0 | - | UL94 |
| Operating Temperature | -50~150 | °C | IEC 60068 -2-14 |

THERMAL CHARACTERISTIC

| Thermal Conductivity | 7.0 | W/m-K | ASTM D 5470 |
|-------------------------|----------------------|-----------|-------------|
| Thermal Resistance | ≤0.3 (@20psi/1mm) | °C.cm2^/W | ASTM D 5470 |

ELECTRICAL PROPERTIES

| Breakdown voltage | ≥8 | kV /mm | ASTM D 149 |
|------------------------|--------|--------|------------|
| Volume resistivity | ≥10^10 | Ω.cm | ASTM D 257 |
| Dielectric constant | ≥5 | @1MHz | ASTM D 150 |
| Dielectric loss | ≤0.1 | @1MHz | ASTM D 150 |