

DTT04-s

Lightweight Thermal Conductive Putty

LiPOLY's DTT04-s is a low-density gap filler material suitable for electronic products and automotive electronic equipment. Its low density and lightweight properties improve product performance, reduce production costs, and reduce material use and energy consumption. The product has a thermal conductivity of 4.0 W/m*K, has high deformation, can flexibly adapt to gaps, and has tolerance compensation characteristics. It can overcome the problem of overflow and dryness, improve heat conduction, and is suitable for automated dispensing production.

■ FEATURES

- / Lightweight, Low Density
- Thermal Conductivity: 4.0 W/m*K
- / High flow rate, extrusion rate under 90psi&60s conditions:56 g/min
- / Bond line thickness:100-1500μm
- / Designed to remove manufacturing tolerances
- / Does not produce stress on delicate components
- / No vertical flow
- / Dispensable for serial manufacture
- / For any high compression and low stress application

■ TYPICAL APPLICATION

- / lightweight applications, such as Automotive electronic devices, Mobile communication device, Drone & aircraft, Sports and leisure electronic products, Portable computers and tablets, wearable devices, Portable game consoles, VR devices and etc.

■ CONFIGURATIONS

- / Cartridges: 30ml, 150ml
- / Bucket: 1kg, 25kg

■ PRESERVATION

It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.

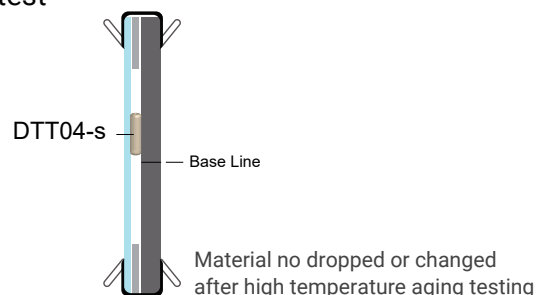
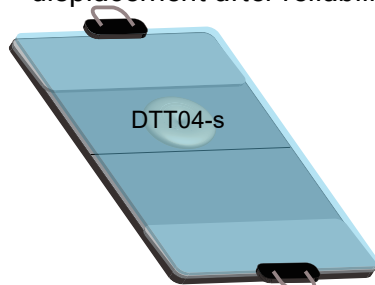


■ TYPICAL PROPERTIES

| PROPERTY | DTT04-s | TEST METHOD | UNIT |
|---|-------------------|-------------|------------------------|
| Color | Yellow | Visual | - |
| Resin base | Silicone | - | - |
| Viscosity | 1000 | DIN 53018 | Pa.s |
| Flow Rate (30cc EFD tube,2.35mm Orifice diameter,90psi&60s) | 56 | By LiPOLY | g/min |
| Density | 2.3 | ASTM D792 | g/cm ³ |
| Application temperature | -60~150 | - | °C |
| Bond line thickness | 100~1500 | - | μm |
| Shelf life | 60 months | - | - |
| ROHS & REACH | Compliant | - | - |
| ELECTRICAL | | | |
| Dielectric breakdown | 13 | ASTM D149 | KV/mm |
| Volume resistivity | >10 ¹⁰ | ASTM D257 | Ohm-m |
| THERMAL | | | |
| Thermal conductivity | 4.0 | ASTM D5470 | W/m*K |
| Thermal impedance@10psi / 60°C | 0.084 | ASTM D5470 | °C-in ² / W |
| Thermal impedance@30psi / 60°C | 0.078 | ASTM D5470 | °C-in ² / W |
| Thermal impedance@50psi / 60°C | 0.075 | ASTM D5470 | °C-in ² / W |

■ VERTICAL RELIABILITY

Using 1.5mm pad as a gap control, put the putty between the aluminum and the glass panel mark the initial position. Then, place it in the oven with 125°C for 1,000 hours and observe its displacement after reliability test



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