

DTT10-s

Lightweight Thermal Conductive Putty

LiPOLY's DTT10-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 10.0 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: 10.0 W/m*K
- / High flow rate, extrusion rate under 90psi&60s conditions:55 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.

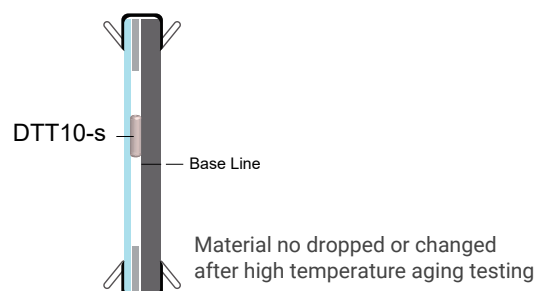


TYPICAL PROPERTIES

| PROPERTY | DTT10-s | TEST METHOD | UNIT |
|---|-------------------|-------------|-----------|
| Color | Pink | Visual | - |
| Resin base | Silicone | - | - |
| Viscosity | 5000 | DIN 53018 | Pa.s |
| Flow Rate (30cc EFD tube,2.35mm Orifice diameter,90psi&60s) | 55 | By LiPOLY | g/min |
| Density | 2.6 | ASTM D792 | g/cm³ |
| Application temperature | -60~150 | - | °C |
| Bond line thickness | 100~1500 | - | μm |
| Shelf life | 60 months | - | - |
| ROHS & REACH | Compliant | - | - |
| ELECTRICAL | | | |
| Dielectric breakdown | 10 | ASTM D149 | KV/mm |
| Volume resistivity | >10 ¹² | ASTM D257 | Ohm-m |
| THERMAL | | | |
| Thermal conductivity | 10.0 | ASTM D5470 | W/m*K |
| Thermal impedance@10psi / 60°C | 0.041 | ASTM D5470 | °C-in²/ W |
| Thermal impedance@30psi / 60°C | 0.038 | ASTM D5470 | °C-in²/ W |
| Thermal impedance@50psi / 60°C | 0.035 | ASTM D5470 | °C-in²/ 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



Note: All specifications provided by LiPOLY are subject to change without notice. The test methods used by LiPOLY are based on the TIM Tester method and ASTM D5470 test method. These test methods are used as the definition standards for LiPOLY. Property values provided in this document are not for product specifications or guaranteed. This document does not guarantee the performance and quality required for the purchaser's specific purpose. The purchaser needs to evaluate and verify the safety before using the material. We strongly recommend the purchaser pre-test the product and verify the performance of the product under the purchaser's specific conditions. Liability and use of the product are the responsibility of the end user. LiPOLY makes no warranty as to the suitability, merchantability, or non-infringement of any LiPOLY material or product for any specific or general uses. LiPOLY shall not be liable for incidental or consequential damages of any kind. All LiPOLY products are sold in accordance with the LiPOLY Terms and Conditions in effect at the time of purchase and a copy of which will be furnished upon request. All rights reserved, including LiPOLY trademarks or registered trademarks of LiPOLY or its affiliates. Statements concerning possible or suggested uses made herein shall not be relied upon or be constructed as a guaranty of patent infringement. Copyright LiPOLY.