# **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	>1012	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



Material no dropped or changed after high temperature aging testing

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 pecific 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 makes and a copy of this method and Conditions in effect at the time of purchase and a copy of this 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 2024 LiPOLY.