LiPOLY®
SHIU LI TECHNOLOGY CO.,LTD

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

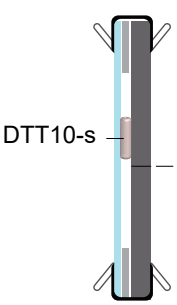
It can be preserved for 60 months under the condition of unopened and under room temperature 25℃.

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℃ for 1,000 hours and observe its displacement after reliability test



Material no dropped or changed after high temperature aging testing