

DTT13-s

Thermal Conductive Putty

LiPOLY DTT13-s is a one-part dispensable material with thermal conductivity 13.0 W/m*K. High deformation can fill small air gaps perfectly to remove tolerance. It also can overcome overflow and drying problems to increase the thermal conductivity. DTT13-s is a great alternative to thermal grease and ideally suited for dispensing using the dispensing robot.

FEATURES

- / Thermal conductivity:13.0 W/m*K
- / Bond line thickness:200-3000μm
- / 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

- / Between CPU and heat sink
- / Between a component and heat sink
- / High speed mass storage drives
- / Telecommunication hardware
- / Flat-panel displays
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

CONFIGURATIONS

- / Cartridges: 30ml, 55ml, 330ml
- / Bucket: 1kg, 25kg

PRESERVATION

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



TYPICAL PROPERTIES

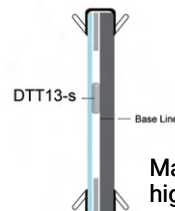
PROPERTY	DTT13-s	TEST METHOD	UNIT
Color	Gray	Visual	-
Resin base	Silicone	-	-
Viscosity	20000	DIN 53018	Pa.s
Flow Rate (30cc EFD tube, 2.35mm Orifice diameter, 90psi&60s)	17	By LiPOLY	g/min
Density	3.3	ASTM D792	g/cm ³
Application temperature	-60~180	-	°C
Bond line thickness	200~3000	-	μm
Shelf life	60 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Volume resistivity	>10 ¹³	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	13.0	ASTM D5470	W/m*K
Thermal impedance@10psi / 60°C	0.031	ASTM D5470	°C-in ² / W
Thermal impedance@30psi / 60°C	0.027	ASTM D5470	°C-in ² / W
Thermal impedance@50psi / 60°C	0.024	ASTM D5470	°C-in ² / W

PLEASE NOTE

/ Using Automatic Homogenizer can improve the sedimentation phenomenon rapidly to achieve a homogeneous effect. We strongly recommend put cartridge in homogenizer for 3~5 minutes before dispensing the material.
Notice: if material homogenized more than 24 hours, it must be homogenized again while use it.

VERTICAL RELIABILITY

Using 3.0mm 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