

# **TPS589**

## **Two-Part Thermal Conductive Sealing Glue**

LiPOLY TPS589 is a two-part sealing gap filler, provides low viscosity and high fluidity. The high deformation material, which can be filling the gap closely, cover the tolerance, and has outstanding conductivity, makes is suitable for filling the peculiar gap.

#### **■ FEATURES**

- / Thermal conductivity: 0.8 W/m\*K
- / Two-parts package and easy to use
- / Waterproof and air-tight
- / Thermally conductive vibration dampening

#### **■ TYPICAL APPLICATION**

- / Automotive electronics
- / Telecommunications
- / Computer and peripherals
- / Between any heat-generating component and a heat sink



#### **■ PRESERVATION**

/ It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

#### **■ PRECAUTIONS**

/ TPS589 The principle of moisture hardening is to harden by reacting with moisture in the air at room temperature. The hardening process starts from the surface in contact with the air and hardens in the deep direction, so the hardening process is a little slow. The speed of hardening is related to temperature and humidity. When there is not enough water vapor in the use environment to react, it may not be completely hardened.

### **■ TYPICAL PROPERTIES**

PROPERTY	TPS589	TEST METHOD	UNIT
Color	White	Visual	-
Resin base	Silicone	-	-
A:B	100:3	-	-
Viscosity	5.0	ISO 3219	Pa.s
Density	1.8	ASTM D792	g/cm³
Application temperature	-60~180	-	°C
Curing condition	25°C / 7day	By LiPOLY	-
Hardness	50	ASTM D2240	Shore A
Shelf life	24 months	-	-
ROHS & REACH	Compliant	-	-
ELECTRICAL			
Dielectric breakdown	14	ASTM D149	KV/mm
Volume resistivity	>1011	ASTM D257	Ohm-m
THERMAL	•		
Thermal conductivity	0.8	ASTM D5470	W/m*K

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 orconsequential 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 2023 LiPOLY.