

# **PK404**

# **Thermal Conductive Gel Pad**

LiPOLY PK404 is a material designed for gap filling. The thermal conductivity is 4.0 W/m\*K. The hardness is Shore OO/30 with high flexibility, high compressibility, high insulating, great self-adhesive, which can cover the tolerance of design making it very stable. It also offers customized shape molding service.

## **■ FEATURES**

- / Thermal conductivity: 4.0 W/m\*K
- / Naturally tacky for ease of manufacture
- / Low thermal impedance
- / Available in a range of thicknesses

# **■ TYPICAL APPLICATION**

- / Notebook computers
- / Heat pipe assemblies
- / Memory modules
- / TV hardware
- / Automotive electronics
- / Mobile devices
- / High speed mass storage drives
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

#### **■ SPECIFICATIONS**

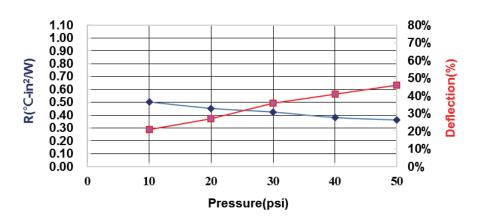
/ Roll form / Sheet form / Die-cut parts



### **■ TYPICAL PROPERTIES**

PROPERTY	PK404	TEST METHOD	UNIT
Color	Blue	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.8	ASTM D792	g/cm³
Hardness	30	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	21	ASTM D5470 modify	%
Deflection @20 psi	27	ASTM D5470 modify	%
Deflection @30 psi	36	ASTM D5470 modify	%
Deflection @40 psi	41	ASTM D5470 modify	%
Deflection @50 psi	46	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>1010	ASTM D257	Ohm
Volume resistivity	>1010	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	4.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.502	ASTM D5470	°C-in²/ W
Thermal impedance@20 psi	0.452	ASTM D5470	°C-in²/ W
Thermal impedance@30 psi	0.423	ASTM D5470	°C-in²/ W
Thermal impedance@40 psi	0.380	ASTM D5470	°C-in²/ W
Thermal impedance@50 psi	0.361	ASTM D5470	°C-in²/ W

### Thermal Resistance vs. Pressure vs. Deflection



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 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 and verify the performance and quality required for the purchaser's specific purpose. The purchaser's specific purpose. The purchaser's specific purpose is the product and verify the performance and quality required for the purchaser's specific purpose. The purchaser's specific purpose is the product and verify the performance and quality required for the purchaser's specific purpose. The purchaser's specific purpose is the purchaser's specific purpose. The purchaser's specific purpose is the product and verify the performance and quality verifies the purchaser's spec