

PK504

Thermal Conductive Gel Pad

LiPOLY PK504 is a material designed for gap filling. The thermal conductivity is 5.0 W/m*K. The hardness is Shore OO/50 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

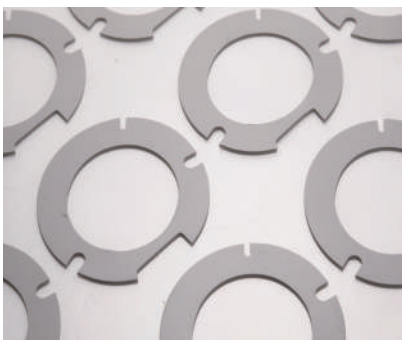
- / Thermal conductivity: 5.0 W/m*K
- / Naturally tacky for ease of manufacture
- / Low thermal impedance
- / Available in a range of thicknesses

■ 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

■ SPECIFICATIONS

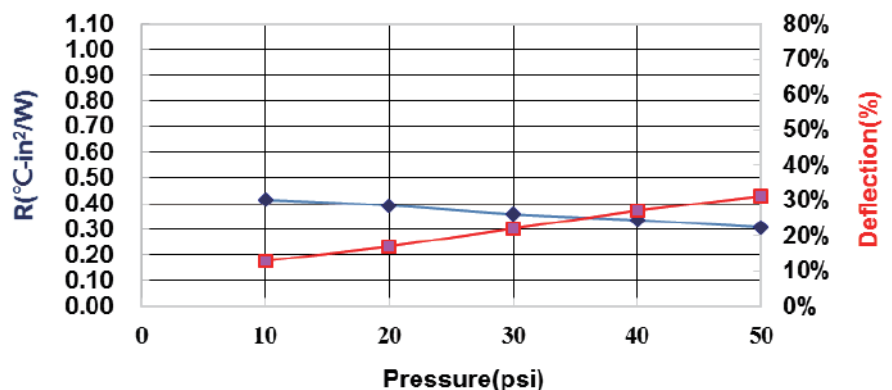
- / Sheet form
- / Die-cut parts



■ TYPICAL PROPERTIES

PROPERTY	PK504	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.0	ASTM D792	g/cm ³
Hardness	50	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	13	ASTM D5470 modify	%
Deflection @20 psi	17	ASTM D5470 modify	%
Deflection @30 psi	22	ASTM D5470 modify	%
Deflection @40 psi	27	ASTM D5470 modify	%
Deflection @50 psi	31	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal Conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.415	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.393	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.358	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.336	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.307	ASTM D5470	°C-in ² / 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 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 or consequential 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 construed as a guaranty of patent infringement. Copyright 2022 LiPOLY.