

# 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

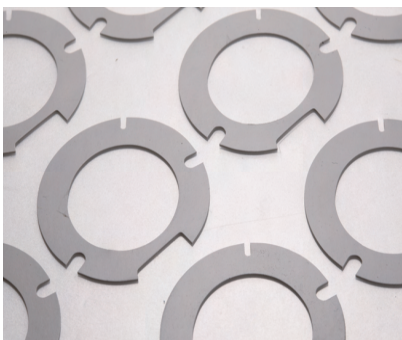
- / Thermal conductivity: 5.0 W/m\*K
- / Naturally tacky for ease of manufacture
- / Low thermal impedance
- / Available in a range of thicknesses

### ■ 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
- / 5G base station & infrastructure
- / EV electric vehicle

### ■ SPECIFICATIONS

- / Roll form / 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 <sup>3</sup>
Hardness	50	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
<b>COMPRESSION@1.0mm</b>			
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	%
<b>ELECTRICAL</b>			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>10 <sup>11</sup>	ASTM D257	Ohm
Volume resistivity	>10 <sup>10</sup>	ASTM D257	Ohm-m
<b>THERMAL</b>			
Thermal conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.415	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@20 psi	0.393	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@30 psi	0.358	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@40 psi	0.336	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@50 psi	0.307	ASTM D5470	°C-in <sup>2</sup> / W

### Thermal Resistance vs. Pressure vs. Deflection

