

# PK223

## Low Oil-Bleeding Thermal Conductive Gel

LiPOLY PK223 is a soft thermally conductive gap filler. With a thermal conductivity of 2.0 W/m\*K and a low thermal impedance, PK223 is suitable for a wide range of applications. This product can be supplied as standard sheets, custom die-cuts or custom molded parts making it suitable for a wide range of applications. PK223 is also UL 94V-0 approved and REACH and RoHS compliant.

### Features-

- Thermal conductivity: 2.0 W/m\*K
- Naturally tacky for ease of manufacture
- Highly compliant
- Low thermal impedance
- Available in a range of thicknesses

### Typical Applications-

- 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	PK223	TEST METHOD	UNIT
Color	White	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.1	ASTM D792	g/cm <sup>3</sup>
Hardness	30	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
COMPRESSION@1.0mm			
Deflection @10 psi	33	ASTM D5470 modify	%
Deflection @20 psi	38	ASTM D5470 modify	%
Deflection @30 psi	42	ASTM D5470 modify	%
Deflection @40 psi	45	ASTM D5470 modify	%
Deflection @50 psi	48	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 <sup>10</sup>	ASTM D257	Ohm
Volume resistivity	>10 <sup>10</sup>	ASTM D257	Ohm-m
THERMAL			
Thermal Conductivity	2.0	ASTM D5470	W/m*K
Thermal impedance@10psi	0.71	ASTM D5470	°C-in <sup>2</sup> /W
Thermal impedance@30psi	0.63	ASTM D5470	°C-in <sup>2</sup> /W
Thermal impedance@50psi	0.57	ASTM D5470	°C-in <sup>2</sup> /W
FLAME RATING			
UL Flammability class	V-0	UL94	-

### Oil Bleeding-

Size 30\*30mm<sup>2</sup>  
 Thickness 1.0mm  
 Compression 50%  
 Temperature 25°C  
 Time 120h

