

## High Insulated Thermal Conductive Film

LiPOLY PR27 is a very thin, high insulator with a thickness of 0.15mm. It uses Polyimide Film as the reinforcement material, which can increase the tensile strength. It's suitable for high power transistors, electrical equipment, and will be the best choice for auto-distribution systems.

### ■ FEATURES

- / Thermal conductivity:1.8 W/m\*K
- / Good insulator
- / Low thermal impedance
- / Reworkable
- / High performance

### ■ TYPICAL APPLICATION

- / Power supplies
- / Motor controls
- / Power semiconductors
- / 5G base station & infrastructure
- / EV electric vehicle

### ■ SPECIFICATIONS

- / Roll form / Sheet form
- / Die-cut parts
- / Single-sided adhesive or double-sided adhesive can be used as required



### ■ TYPICAL PROPERTIES

PROPERTY	PR27	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	0	-	-
Reinforced layer	Polyimide	-	-
Thickness	0.10 / 0.125 / 0.15	ASTM D374	mm
Density	1.5	ASTM D792	g/cm <sup>3</sup>
Hardness	80	ASTM D2240	Shore A
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-

ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV
Surface resistivity	>10 <sup>13</sup>	ASTM D257	Ohm
Volume resistivity	>10 <sup>12</sup>	ASTM D257	Ohm-m

THERMAL			
Thermal conductivity	1.8	ASTM D5470	W/m*K
Thermal impedance@20psi	0.441	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@60psi	0.360	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@100psi	0.329	ASTM D5470	°C-in <sup>2</sup> / W

