

# PR27

## High Insulated Thermal Conductive Film

LiPOLY PR27 is a very thin, high insulator with a thickness of 0.10~0.15mm. 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@0.15mm			
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@0.15mm			
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

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