

# PR27

## High Insulator Thermal Conductive Film

LiPOLY PR27 with super thin thickness that only have 0.15mm. It used Polyimide Film as the reinforcement material, which can increase the tensile strength, to avoid being disrepair. It has great dielectric strength, can burden 12K voltage, and with high insulation. It's suitable for high power transistor, electrical equipment, and will be the best choice for auto-distribution system. The product is qualified for UL.



### Features-

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

### Typical Applications-

- Power supplies
- Motor controls
- Power semiconductors

### Specifications-

- Sheet form
- Die-cut parts

PROPERTY	PR27	TEST METHOD	UNIT
Color	Gray	Visual	-
Reinforced layer	Polyimide	-	
Thickness	0.15	ASTM D374	mm
Density	1.5	ASTM D792	g/cm <sup>3</sup>
Hardness	80	ASTM D2240	Shore A
Application temperature	-45~180	-	°C
Tensile Strength	5000	ASTM D412	psi
Elongation	30	ASTM D412	%
<b>ELECTRICAL</b>			
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
<b>THERMAL</b>			
Thermal Conductivity	1.8	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.52	ASTM D5470	°C-in <sup>2</sup> /W
Thermal impedance@30 psi	0.42	ASTM D5470	°C-in <sup>2</sup> /W
Thermal impedance@50 psi	0.31	ASTM D5470	°C-in <sup>2</sup> /W
<b>FLAME RATING</b>			
UL Flammability class	V-0	UL94	-

※ These data are provided for reference only. Engineers are reminded to test the material in varied application.