

## Insulated Thermal Conductive Tape

LiPOLY AT900C is a thermally conductive tape. With a fiberglass reinforced layer and a thermal conductivity of 1.2 W/m\*K this product is designed for applications where additional durability is needed. AT900C can be provided in either standard sheets or custom-die cuts.

### ■ FEATURES

- / Thermal conductivity:1.2 W/m\*K
- / Excellent adhesive properties
- / Designed for manufacture
- / Excellent long term reliability
- / Fiberglass reinforced layer

### ■ TYPICAL APPLICATION

- / Automotive electronics
- / Telecommunications
- / LED light bar & LED lamp
- / Between any heat-generating component and heat sink
- / 5G base station & infrastructure
- / EV electric vehicle

### ■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

### ■ TYPICAL PROPERTIES

PROPERTY	AT900C		TEST METHOD	UNIT
Color	White		Visual	-
Resin base	Acrylic		-	-
Reinforced layer	Fiberglass		-	-
Thickness	0.15	0.25	ASTM D374	mm
Density	1.7	1.7	ASTM D792	g/cm <sup>3</sup>
Application temperature	-60~120	-60~120	-	°C
Short time temp. @30sec	200	200	-	°C
ROHS	Compliant	Compliant	-	-
<b>ADHESION</b>				
Initial tack	14	12	PSTC-6	cm
Lap shear strength	55	60	ASTM D1002	N/cm <sup>2</sup>
Die shear strength@25°C	100	100	-	N/cm <sup>2</sup>
Die shear strength@80°C	65	65	-	N/cm <sup>2</sup>
Holding power 1kg @25°C	>10000	>10000	PSTC-7	min
Holding power 1kg @80°C	>10000	>10000	PSTC-7	min
90° Peeling strength @ 25°C, 72 hrs	>6	>8	ASTM D3330	N/inch
90° Peeling strength @ Thermal aging	>10	>15	80°C 1000 hrs	N/inch
90° Peeling strength @ HAST	>18	>22	85°C/85%RH 1000 hrs	N/inch
90° Peeling strength @ Thermal cycling	>13	>19	-40°C~120°C 500 cycles	N/inch
<b>ELECTRICAL</b>				
Dielectric breakdown	3	4	ASTM D149	KV
Surface resistivity	>10 <sup>11</sup>	>10 <sup>11</sup>	ASTM D257	Ohm
Volume resistivity	>10 <sup>11</sup>	>10 <sup>11</sup>	ASTM D257	Ohm-m
<b>THERMAL</b>				
Thermal conductivity	1.2	1.2	ASTM D5470	W/m*K
Thermal impedance@5psi	0.72	0.98	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@10psi	0.68	0.94	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@15psi	0.66	0.92	ASTM D5470	°C-in <sup>2</sup> / W