

# AT910

## UL Flammability Thermal Conductive Tape

LiPOLY AT910 is a thermally conductive tape. With a fiberglass reinforced layer and a thermal conductivity of 1.0 W/m\*K this product is designed for applications where additional durability is needed. AT910 can be provided in either standard sheets or custom-die cuts.

### Features-

- Thermal conductivity:1.0 W/m\*K
- Excellent adhesive properties
- Designed for manufacture
- Excellent long term reliability
- Fiberglass reinforced layer

### Typical Applications-

- Automotive electronics
- Telecommunications
- LED light bar & LED lamp
- Between any heat-generating component and heat sink

### Specifications-

- Sheet form
- Die-cut parts

### Typical Properties-

PROPERTY	AT910		TEST METHOD	UNIT
Color	White		Visual	-
Reinforced layer	Fiberglass		-	-
Thickness	0.15	0.25	ASTM D374	mm
Density	1.8	1.8	ASTM D792	g/cm <sup>3</sup>
Application temperature	-60~120	-60~120	-	°C
Short time Temp. @ 30 sec	200	200	-	°C
<b>ADHESION</b>				
Initial tack	11	8	PSTC-6	cm
Lap shear strength	50	50	ASTM D1002	N/cm <sup>2</sup>
Die shear strength @ 25 °C	100	100	-	N/cm <sup>2</sup>
Die shear strength @ 80 °C	70	70	-	N/cm <sup>2</sup>
Holding power 1kg @ 25 °C	>10000	>10000	PSTC-7	min
Holding power 1 kg @ 80 °C	>10000	>10000	PSTC-7	min
90 ° Peeling Strength @ 25 °C , 72 Hrs	>5	>6	ASTM D3330	N/inch
90 ° Peeling Strength @ Thermal Aging	>14	>20	80°C 1000 hrs	N/inch
90 ° Peeling Strength @ HAST	>20	>24	85 °C / 85%RH 1000 hrs	N/inch
90 ° Peeling Strength @ Thermal Cycling	>27	>28	-40°C ~120 °C 500 cycles	N/inch
<b>ELECTRICAL</b>				
Dielectric strength (DCV)	3	4	ASTM D149	KV
Dielectric strength (ACV)	2	3	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	1.0	1.0	ASTM D5470	W/m*K
Thermal impedance@ 5 psi	0.81	1.38	ASTM D5470	°C-in <sup>2</sup> /W
Thermal impedance@ 10 psi	0.78	1.30	ASTM D5470	°C-in <sup>2</sup> /W
Thermal impedance@ 15 psi	0.76	1.25	ASTM D5470	°C-in <sup>2</sup> /W
<b>FLAME RATING</b>				
UL Flammability class	V-0	V-0	UL94	-