LiPOLY®
SHIU LI TECHNOLOGY CO.,LTD

AT900A

Insulated Thermal Conductive Tape

LiPOLY AT900A is a thermally conductive tape. With a fiberglass reinforced layer and a thermal conductivity of 0.9 W/m*K this product is designed for applications where additional durability is needed. AT900A can be provided in either standard sheets or custom-die cuts.

FEATURES

/ Thermal conductivity:0.9 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

/ Roll form / Sheet form
/ Die-cut parts

TYPICAL PROPERTIES

PROPERTY	AT900A		TEST METHOD	UNIT
Color	White		Visual	-
Resin base	Acrylic		-	-
Reinforced layer	Fiberglass		-	-
Thickness	0.15	0.25	ASTM D374	mm
Density	1.6	1.6	ASTM D792	g/cm³
Application temperature	-60~120	-60~120	-	°C
Short time temp. @15min	200	200	-	°C
ROHS	Compliant	Compliant	-	-
ADHESION				
Initial tack	10	8	PSTC-6	cm
Lap shear strength	60	60	ASTM D1002	N/cm²
Die shear strength@25°C	107	94	-	N/cm²
Die shear strength@80°C	70	70	-	N/cm²
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	>10	>12	ASTM D3330	N/inch
90° Peeling strength @ Thermal aging	>14	>20	80°C 1000 hrs	N/inch
90° Peeling strength @ HAST	>20	>25	85°C/85%RH 1000 hrs	N/inch
90° Peeling strength @ Thermal cycling	>15	>20	-40°C~120°C 500 cycles	N/inch
ELECTRICAL				
Dielectric breakdown	2	3	ASTM D149	KV
Surface resistivity	$>10^{10}$	$>10^{10}$	ASTM D257	Ohm
Volume resistivity	$>10^{10}$	$>10^{10}$	ASTM D257	Ohm-m
THERMAL				
Thermal conductivity	0.9	0.9	ASTM D5470	W/m*K
Thermal impedance@5psi	0.87	1.15	ASTM D5470	°C-in²/ W
Thermal impedance@10psi	0.85	1.14	ASTM D5470	°C-in²/ W
Thermal impedance@15psi	0.82	1.12	ASTM D5470	°C-in²/ W