LiPOLY®
SHIU LI TECHNOLOGY CO.,LTD

AT920-s

Insulated Thermal Conductive Tape

LiPOLY AT920-s is an unsupported thermally conductive tape with a thermal conductivity of 3.5 W/m*K. The thickness can be 0.50 ~ 3.0 mm, and the AT920-s can withstand 7~10 KV. Using highly thermal conductive particles makes the tape extremely reliable and easy to use. The stickiness and strength will increase when temperature and pressure rise.

FEATURES
/ Thermal conductivity:3.5 W/m*K
/ Excellent adhesive properties
/ Designed for manufacture
/ Excellent long term reliability

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	AT920-s	TEST METHOD	UNIT
Color	White	Visual	-
Resin base	Acrylic	-	-
Reinforced layer	None	-	-
Thickness	0.50~3.0	ASTM D374	mm
Density	2.6	ASTM D792	g/cm³
Application temperature	-60~120	-	°C
Short time temp. @15min	200	-	°C
ROHS	Compliant	-	-
ADHESION@0.5mm			
Initial tack	8	PSTC-6	cm
Lap shear strength	35	ASTM D1002	N/cm²
Die shear strength@25°C	85	-	N/cm²
Die shear strength@80°C	40	-	N/cm²
Holding power 1kg@25°C	>10000	PSTC-7	min
Holding power 1kg@80°C	>10000	PSTC-7	min
90° Peeling strength@ 25°C, 72 hrs	>9	ASTM D3330	N/inch
90° Peeling strength@ Thermal aging	>13	80°C 1000 hrs	N/inch
90° Peeling strength@ HAST	>22	85°C/85%RH 1000 hrs	N/inch
90° Peeling strength@ Thermal cycling	>13	-40°C~120°C 500 cycles	N/inch
ELECTRICAL@0.5mm			
Dielectric breakdown	7	ASTM D149	KV
Surface resistivity	$>10^{11}$	ASTM D257	Ohm
Volume resistivity	$>10^{12}$	ASTM D257	Ohm-m
THERMAL@0.5mm			
Thermal conductivity	3.5	ASTM D5470	W/m*K
Thermal impedance@5psi	0.54	ASTM D5470	°C-in²/ W
Thermal impedance@10psi	0.53	ASTM D5470	°C-in²/ W
Thermal impedance@15psi	0.50	ASTM D5470	°C-in²/ W