LiPOLY®
SHIU LI TECHNOLOGY CO.,LTD

ST6000-S

UL Flammability Thermal Conductive Tape

LiPOLY ST6000-S is a thermally conductive tape with UL high temperature heat resistance. The thermal conductivity is 1.8 W/m*K. The stickiness and strength of the thermal tape will increase when temperatures and pressure rise. They are designed to securely bond heat sinks to power dissipating components without an additional clamping mechanism.)

FEATURES

/ Thermal conductivity:1.8 W/m*K
/ High temperature stability
/ Easy to assemble

TYPICAL APPLICATION

/ Power supplies
/ Motor controls
/ Power semiconductors
/ 5G base station & infrastructure
/ EV electric vehicle

SPECIFICATIONS

/ Sheet form
/ Die-cut parts

TYPICAL PROPERTIES

PROPERTY	ST6000-S	TEST METHOD	UNIT
Color	White	Visual	-
Resin base	Silicone	-	-
Reinforced layer	None	-	-
Thickness	0.2	ASTM D374	mm
Density	2.3	ASTM D792	g/cm³
Application temperature	-60~180	-	°C
Short time temp. @30sec	288	-	°C
ROHS	Compliant	-	-
ADHESION			
Lap shear strength	35	ASTM D1002	N/cm²
Die shear strength@25°C	50	-	N/cm²
Die shear strength@80°C	50	-	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	>8	ASTM D3330	N/inch
90° Peeling strength @ Thermal aging	>7	80°C 1000 hrs	N/inch
90° Peeling strength @ HAST	>10	85°C/85%RH 1000 hrs	N/inch
90° Peeling strength @ Thermal cycling	>9.5	-40°C~120°C 500 cycles	N/inch
ELECTRICAL			
Dielectric breakdown	3.5	ASTM D149	KV
Surface resistivity	$>10^9$	ASTM D257	Ohm
Volume resistivity	$>10^9$	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	1.8	ASTM D5470	W/m*K
Thermal impedance@5psi	0.81	ASTM D5470	°C-in²/ W
Thermal impedance@10psi	0.72	ASTM D5470	°C-in²/ W
Thermal impedance@15psi	0.65	ASTM D5470	°C-in²/ W