

ST6000F

High Temperature Thermal Conductive Tape

LiPOLY ST6000F is a thermally conductive tape with high-temperature heat resistance. The thermal conductivity is 1.2 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:1.2 W/m*K
 / High temperature stability
 / Easy to assemble

■ TYPICAL APPLICATION

/ Power supplies
 / Motor controls
 / Power semiconductors

■ SPECIFICATIONS

/ Roll form / Sheet form
 / Die-cut parts

■ TYPICAL PROPERTIES

PROPERTY	ST6000F		TEST METHOD	UNIT
Color	White		Visual	-
Reinforced layer	Fiberglass		-	-
Thickness	0.15	0.25	ASTM D374	mm
Density	1.6	1.6	ASTM D792	g/cm ³
Application temperature	-60~170	-60~170	-	°C
Short time temp. @30sec	288	288	-	°C
ROHS	Compliant	Compliant	-	-
ADHESION				
Lap shear strength	74	76	ASTM D1002	N/cm ²
Die shear strength@25°C	113	126	-	N/cm ²
Die shear strength@80°C	80	85	-	N/cm ²
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	>11	>12	ASTM D3330	N/inch
90° Peeling strength @ Thermal aging	>7	>10	80°C 1000 hrs	N/inch
90° Peeling strength @ HAST	>7	>13	85°C/85%RH 1000 hrs	N/inch
90° Peeling strength @ Thermal cycling	>7	>10	-40°C~120°C 500 cycles	N/inch
ELECTRICAL				
Dielectric breakdown	3	4	ASTM D149	KV
Surface resistivity	>10 ¹¹	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹²	>10 ¹²	ASTM D257	Ohm-m
THERMAL				
Thermal conductivity	1.2	1.2	ASTM D5470	W/m*K
Thermal impedance@5psi	0.78	1.24	ASTM D5470	°C-in ² / W
Thermal impedance@10psi	0.71	1.16	ASTM D5470	°C-in ² / W
Thermal impedance@15psi	0.64	1.14	ASTM D5470	°C-in ² / W