PR27S

LiPOLY
SHIU LI TECHNOLOGY CO.,LTD

Single-Sided Thermal Conductive Adhesive

LiPOLY PR27S is a very thin, high insulator with a thickness of 0.15mm. It uses Polyimide Film as the reinforcement material, which can increase the tensile strength. It's suitable for high power transistors, electrical equipment, and will be the best choice for auto-distribution systems.

FEATURES

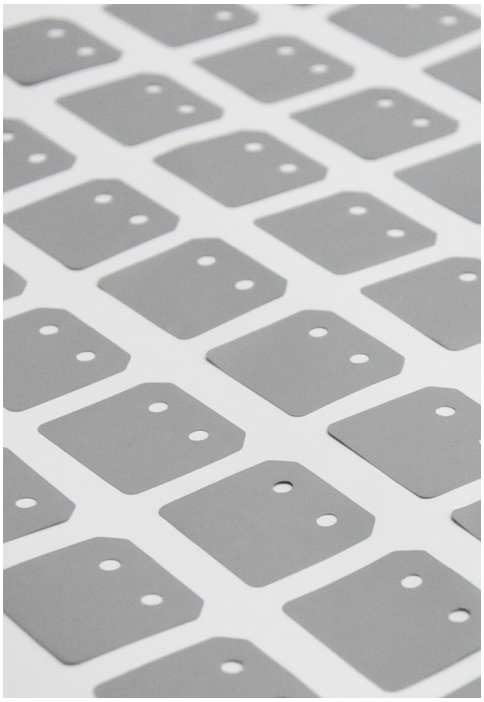
/ Thermal conductivity:1.5 W/m*K
/ Good insulator
/ Low thermal impedance
/ Reworkable
/ High performance

TYPICAL APPLICATION

/ Power supplies
/ Motor controls
/ Power semiconductors

SPECIFICATIONS

/ Sheet form
/ Die-cut parts



TYPICAL PROPERTIES

PROPERTY	PR27S	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	1	-	-
Reinforced layer	Polyimide	-	-
Thickness	0.15	ASTM D374	mm
Density	1.5	ASTM D792	g/cm³
Hardness	80	ASTM D2240	Shore A
Application temperature	-60~120	-	°C
ROHS&REACH	Compliant	-	-
ADHESION			
Initial tack	13	PSTC-6	cm
Lap shear strength	60	ASTM D1002	N/cm²
Die shear strength@25°C	100	-	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	>10	ASTM D3330	N/inch
90°Peeling strength @ Thermal aging	>15	80°C 1000 hrs	N/inch
90°Peeling strength @ HAST	>18	85°C/85%RH 1000 hrs	N/inch
90°Peeling strength @ Thermal cycling	>14	-40°C~120°C 500 cycles	N/inch
ELECTRICAL			
Dielectric breakdown	7	ASTM D149	KV
Surface resistivity	$>10^{12}$	ASTM D257	Ohm
Volume resistivity	$>10^{12}$	ASTM D257	Ohm-m
THERMAL			
Thermal Conductivity	1.5	ASTM D5470	W/m*K
Thermal impedance@20psi	0.512	ASTM D5470	°C-in2/ W
Thermal impedance@60psi	0.332	ASTM D5470	°C-in2/ W
Thermal impedance@100psi	0.297	ASTM D5470	°C-in2/ W