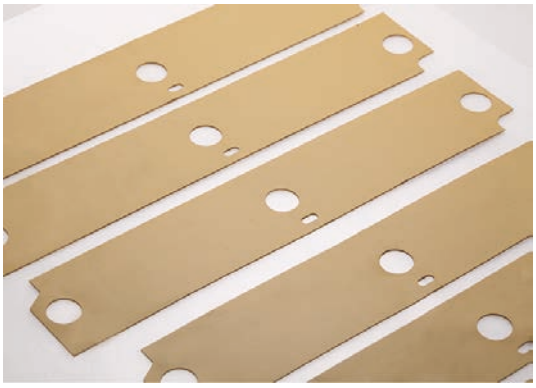
SH1500/2000/3000

High Insulator Thermal Conductive Film

LiPOLY SH1500 used fiberglass cloth as the reinforcement material, to combine with thermal conductive silicon, makes it has high thermal conduction and great compression strength. The thermal conductivity is 1.5/2.0/3.0 W/m*K, the thickness is 0.23~0.35mm. It’s high insulation, and the fiberglass material increase the strength of structure makes it cut resistant, and It’s the best choice for high torque force of screw setting. It’s suitable to setting between the electrical isolative of high power electronic component, and the heat sink. The product is qualified for UL.



Features-

- Thermal conductivity: 1.5/2.0/3.0 W/m*K
- Good insulator
- Use in screw mounted
- Re-workable
- Hig performance film
- Fiberglass reinforced

Typical Applications-

- Power supplies
- Motor controls
- Automotive elecronics

Specifications-

- Sheet form
- Die-cut parts

PROPERTY	SH1500	SH2000	SH3000	TEST METHOD	UNIT
Color	Yellow	Green	Pink	Visual	-
Reinforced layer	Fiberglass	Fiberglass	Fiberglass	-	-
Thickness	0.23	0.30	0.35	ASTM D374	mm
Density	2.3	2.6	2.8	ASTM D792	g/cm^3
Hardness	80	80	80	ASTM D2240	Shore A
Application temperature	-60~180	-60~180	-60~180	-	℃
Tensile Strength.	>2000	>2000	>1200	ASTM D412	psi
ELECTRICA					
Dielectric breakdown	>4	>5	>5.5	ASTM D149	KV
Surface resistivity	>10^{12}	>10^{12}	>10^{12}	ASTM D257	Ohm
Volume resistivity	>10^{12}	>10^{12}	>10^{10}	ASTM D257	Ohm-m
THERMAL					
Thermal Conductivity	1.5	2.0	3.0	ASTM D5470	W/m*K
Thermal impedance@20 psi	0.63	0.53	0.57	ASTM D5470	℃-In^2/W
Thermal impedance@60 psi	0.45	0.38	0.39	ASTM D5470	℃-In^2/W
Thermal impedance@100 psi	0.41	0.36	0.36	ASTM D5470	℃-In^2/W
FLAME RATING					
UL Flammability class	V-0	V-0	V-0	UL94	-

※These data are provided for reference only. Engineers are reminded to test the material in varied application.