

SH1500/2000/3000

High Insulated Thermal Conductive Pad Series

LiPOLY SH1500/2000/3000 is a thermal insulator uses fiberglass cloth as a reinforcement material, combined with thermal conductive silicon, giving it high thermal conduction and great compression strength. The thermal conductivity is 1.5/2.0/3.0 W/m*K, the thickness is 0.20~0.45mm. Its high insulation and fiberglass materials increase the strength of its structure making it cut resistant. SH1500/2000/3000 is the best choice for high torque screw setting. It functions well with electrical isolative of high power electronic component and the heat sink.

■ FEATURES

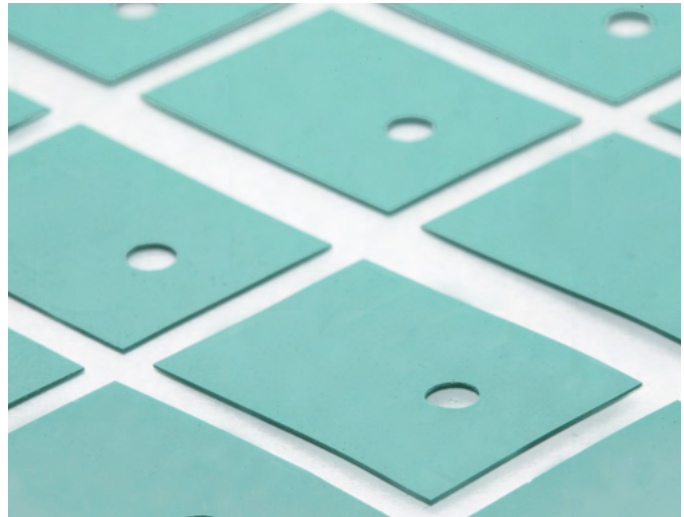
- / Thermal conductivity:1.5/2.0/3.0 W/m*K
- / Excellent insulator
- / Reworkable
- / Fiberglass reinforced

■ TYPICAL APPLICATION

- / Power supplies
- / Motor controls
- / EV electric vehicle
- / Automotive electronics
- / 5G base station & infrastructure

■ SPECIFICATIONS

- / Roll form / Sheet form
- / Die-cut parts



■ TYPICAL PROPERTIES

PROPERTY	SH1500	SH2000		SH3000			TEST METHOD (UNIT)
Color	Yellow	Green		Pink			Visual
Reinforced layer	Fiberglass	Fiberglass		Fiberglass			-
Thickness	0.20	0.25	0.30	0.25	0.30	0.45	ASTM D374 (mm)
Density	2.3	2.6	2.6	2.8	2.8	2.8	ASTM D792 (g/cm ³)
Hardness	80	80	80	80	80	80	ASTM D2240 (Shore A)
Application temperature	-60~180	-60~180	-60~180	-60~180	-60~180	-60~180	(°C)
ROHS	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	-
ELECTRICAL							
Dielectric breakdown	4.0	4.0	5.0	4.0	5.0	6.0	ASTM D149 (KV)
Surface resistivity	>10 ¹²	>10 ¹²	>10 ¹²	>10 ¹²	>10 ¹²	>10 ¹²	ASTM D257 (Ohm)
Volume resistivity	>10 ¹²	>10 ¹²	>10 ¹²	>10 ¹²	>10 ¹²	>10 ¹²	ASTM D257 (Ohm-m)
THERMAL							
Thermal conductivity	1.5	2.0	2.0	3.0	3.0	3.0	ASTM D5470 (W/m*K)
Thermal impedance@20 psi	0.52	0.45	0.53	0.41	0.48	0.56	ASTM D5470 (°C-in ² / W)
Thermal impedance@60 psi	0.31	0.32	0.38	0.28	0.33	0.40	ASTM D5470 (°C-in ² / W)
Thermal impedance@100 psi	0.28	0.30	0.36	0.25	0.30	0.38	ASTM D5470 (°C-in ² / W)