

# DCTP140-s

## High Insulated Thermal Conductive Pad

LiPOLY DCTP140-s 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 4.5 W/m\*K, the thickness is 0.25~0.45mm. Its high insulation and fiberglass materials increase the strength of its structure making it cut resistant. DCTP140-s 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:4.5 W/m\*K
- / Excellent insulator
- / Re-workable
- / 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	DCTP140-s			TEST METHOD	UNIT
Color	Blue			Visual	-
Reinforced layer	Fiberglass			-	-
Thickness	0.25	0.30	0.45	ASTM D374	mm
Density	2.8	2.8	2.8	ASTM D792	g/cm <sup>3</sup>
Hardness	80	80	80	ASTM D2240	Shore A
Application temperature	-60~180	-60~180	-60~180	-	°C
ROHS	Compliant	Compliant	Compliant	-	-
<b>ELECTRICAL</b>					
Dielectric breakdown	4.0	5.0	6.0	ASTM D149	KV
Surface resistivity	>10 <sup>12</sup>	>10 <sup>12</sup>	>10 <sup>12</sup>	ASTM D257	Ohm
Volume resistivity	>10 <sup>10</sup>	>10 <sup>10</sup>	>10 <sup>10</sup>	ASTM D257	Ohm-m
<b>THERMAL</b>					
Thermal conductivity	4.5	4.5	4.5	ASTM D5470	W/m*K
Thermal impedance@20psi	0.357	0.408	0.456	ASTM D5470	°C-in <sup>2</sup> /W
Thermal impedance@60psi	0.223	0.260	0.316	ASTM D5470	°C-in <sup>2</sup> /W
Thermal impedance@100psi	0.207	0.221	0.265	ASTM D5470	°C-in <sup>2</sup> /W