

Exceptionally Soft Thermal Conductive Gel Pad

LiPOLY BS89 is an ultra-soft thermally conductive gel pad with a thermal conductivity of 5.0 W/m*K. BS89 offers excellent compression under minimal force with high recovery characteristics. This product can be supplied as standard sheets, custom die-cuts or custom molded parts.

FEATURES

- / Thermal conductivity: 5.0 W/m*K
- / High compression rate
- / Low thermal impedance
- / High recovery
- / Available in a range of thicknesses

TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Notebook computers
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

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



TYPICAL PROPERTIES

PROPERTY	BS89	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.0	ASTM D792	g/cm ³
Hardness	25	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	29	ASTM D5470 modify	%
Deflection @20 psi	39	ASTM D5470 modify	%
Deflection @30 psi	47	ASTM D5470 modify	%
Deflection @40 psi	52	ASTM D5470 modify	%
Deflection @50 psi	56	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	12	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.318	ASTM D5470	°C-in ² /W
Thermal impedance@20 psi	0.266	ASTM D5470	°C-in ² /W
Thermal impedance@30 psi	0.233	ASTM D5470	°C-in ² /W
Thermal impedance@40 psi	0.211	ASTM D5470	°C-in ² /W
Thermal impedance@50 psi	0.194	ASTM D5470	°C-in ² /W

Thermal Resistance vs. Pressure vs. Deflection

