

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

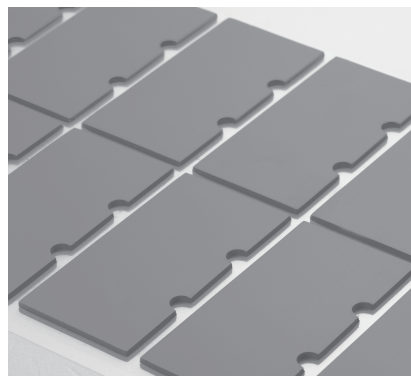
- / Thermal conductivity: 5.0 W/m*K
- / High compression rate
- / Low thermal impedance
- / High recovery
- / Available in a range of thicknesses

TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Notebook computers
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware

SPECIFICATIONS

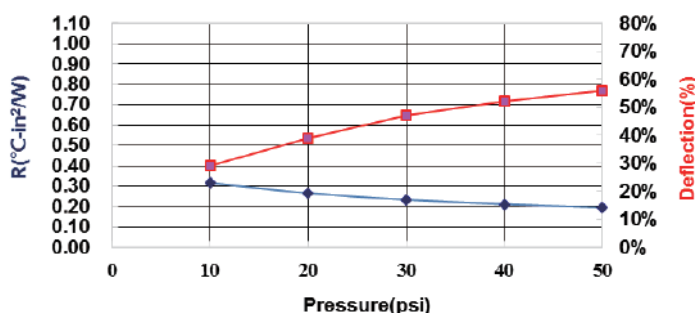
- / Sheet form
- / Die-cut parts



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	8	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



Note: All specifications provided by LiPOLY are subject to change without notice. The test methods used by LiPOLY are based on the TIM Tester method and ASTM D5470 test method. These test methods are used as the definition standards for LiPOLY. Property values provided in this document are not for product specifications or guaranteed. This document does not guarantee the performance and quality required for the purchaser's specific purpose. The purchaser needs to evaluate and verify the safety before using the material. We strongly recommend the purchaser pre-test the product and verify the performance of the product under the purchaser's specific conditions. Liability and use of the product are the responsibility of the end user. LiPOLY makes no warranty as to the suitability, merchantability, or non-infringement of any LiPOLY material or product for any specific or general uses. LiPOLY shall not be liable for incidental or consequential damages of any kind. All LiPOLY products are sold in accordance with the LiPOLY Terms and Conditions in effect at the time of purchase and a copy of which will be furnished upon request. All rights reserved, including LiPOLY trademarks or registered trademarks of LiPOLY or its affiliates. Statements concerning possible or suggested uses made herein shall not be relied upon or be constructed as a guaranty of patent infringement. Copyright 2022 LiPOLY.