

S393

High Ductile Thermal Conductive Pad

LiPOLY S393 is a product with high ductile thermal conductivity. Having good stretchability and high deformation. The toughness structure can enhance the operability and durability of material. It won't easy to break and deform whether stamped, punched, strip type, or custom cutting. Your best choice for shock and tolerance absorbing.

■ FEATURES

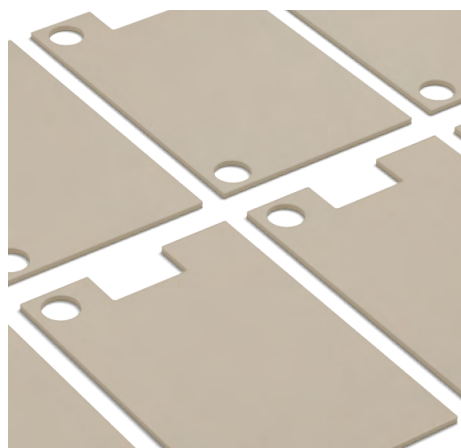
- / Thermal conductivity: 2.2 W/m*K
- / Easy to assemble
- / High reliability
- / Highly ductile and tear resistant
- / Shock and vibrating absorber

■ TYPICAL APPLICATION

- / Between CPU and heat sink.
- / Between a component and heat sink
- / Flat-panel displays
- / LED
- / HDDs, DVDs
- / Memory modules
- / Power supplies
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

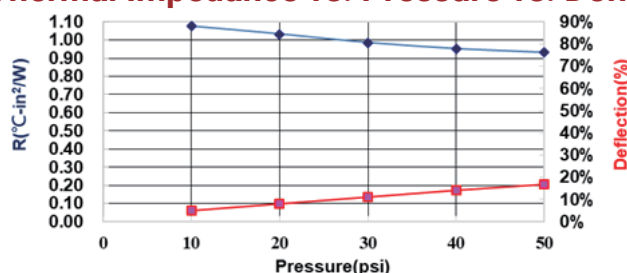
- / Sheet form
- / Die-cut parts



■ TYPICAL PROPERTIES

| PROPERTY | S393 | TEST METHOD | UNIT |
|----------------------------|-------------------|-------------------|------------------------|
| Color | Light green | Visual | - |
| Surface tack 2-side/1-side | 2 | - | - |
| Thickness | Customized | ASTM D374 | mm |
| Density | 2.2 | ASTM D792 | g/cm ³ |
| Hardness | 15 | ASTM D2240 | Shore A |
| Application temperature | -60~200 | - | °C |
| Short time temp. @10min | -60~270 | - | °C |
| Tensile strength | 0.75 | ASTM D412 | MPa |
| Elongation | 76 | ASTM D412 | % |
| ROHS & REACH | Compliant | - | - |
| COMPRESSION@1.0mm | | | |
| Deflection @10 psi | 5 | ASTM D5470 modify | % |
| Deflection @20 psi | 8 | ASTM D5470 modify | % |
| Deflection @30 psi | 11 | ASTM D5470 modify | % |
| Deflection @40 psi | 14 | ASTM D5470 modify | % |
| Deflection @50 psi | 17 | ASTM D5470 modify | % |
| ELECTRICAL | | | |
| Dielectric breakdown | 15 | ASTM D149 | KV/mm |
| Surface resistivity | >10 ¹¹ | ASTM D257 | Ohm |
| Volume resistivity | >10 ¹¹ | ASTM D257 | Ohm-m |
| THERMAL | | | |
| Thermal conductivity | 2.2 | ASTM D5470 | W/m*K |
| Thermal impedance@10 psi | 1.075 | ASTM D5470 | °C-in ² / W |
| Thermal impedance@20 psi | 1.033 | ASTM D5470 | °C-in ² / W |
| Thermal impedance@30 psi | 0.986 | ASTM D5470 | °C-in ² / W |
| Thermal impedance@40 psi | 0.953 | ASTM D5470 | °C-in ² / W |
| Thermal impedance@50 psi | 0.932 | ASTM D5470 | °C-in ² / W |

Thermal Impedance 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 LiPOLY.