

DTT44-s

Lightweight Thermal Conductive Gel Pad

LiPOLY DTT44-s is a soft thermally conductive gel pad specifically designed for network ing communication applications.DTT44-s is designed to focus on D_k and D_f to reduce interference in RF modules. DTT44-s has a thermal conductivity of 3.0 W/m*K. This product can be supplied as stan dard sheets, custom die-cuts or custom molded parts making it suitable for a wide range of applications.

FEATURES

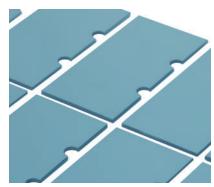
- / Lightweight, Low Density Thermal conductivity: 3.0 W/m*K
- / Hardness: Shore 00/50
- / Low dielectric constant
- / For high frequency applications
- / Available in a range of thicknesses

TYPICAL APPLICATION

- / Communications satellite
- / Satellite positioning devices
- / IoT devices
- / Telecommunication hardware
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

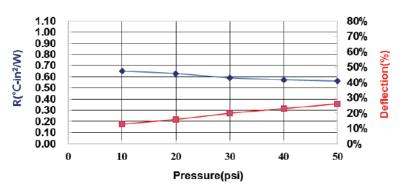
/ Sheet form / Die-cut parts



TYPICAL PROPERTIES

PROPERTY	DTT44-s	TEST METHOD	UNIT
Color	Blue	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.2	ASTM D792	g/cm³
Hardness	50	ASTM D2240	Shore OO
Water absorption	0.02	ASTM D570	%
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	13	ASTM D5470 modify	%
Deflection @20 psi	16	ASTM D5470 modify	%
Deflection @30 psi	20	ASTM D5470 modify	%
Deflection @40 psi	23	ASTM D5470 modify	%
Deflection @50 psi	26	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	11	ASTM D149	KV/mm
Surface resistivity	>1010	ASTM D257	Ohm
Volume resistivity	>1010	ASTM D257	Ohm-m
Dielectric constant@2GHz Dk	4.115	ASTM D150	-
Dielectric constant@6GHz Dk	4.214	ASTM D150	-
Dielectric constant@10GHz Dk	3.983	ASTM D150	-
Dielectric loss@2GHz Df	0.00486	ASTM D150	-
Dielectric loss@6GHz Df	0.00704	ASTM D150	-
Dielectric loss@10GHz Df	0.00940	ASTM D150	-
THERMAL			
Thermal conductivity	3.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.652	ASTM D5470	°C-in²/W
Thermal impedance@20 psi	0.630	ASTM D5470	°C-in²/W
Thermal impedance@30 psi	0.591	ASTM D5470	°C-in²/W
Thermal impedance@40 psi	0.574	ASTM D5470	°C-in²/W
Thermal impedance@50 psi	0.562	ASTM D5470	°C-in²/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 guarantee. This document does not guarantee the performance and quality required for 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 crocosequential 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 2024 LiPOLY.