LiPOLY®
SHIU LI TECHNOLOGY CO.,LTD

DTT44-s

Lightweight Thermal Conductive Gel Pad

LiPOLY DTT44-s is a soft thermally conductive gel pad specifically designed for network ing commu- nication applica- tions.DTT44-s is designed to focus on D_k and D_f to reduce interference in RF modules. DTT44-s has a thermal conductivi- ty 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 appli- cations.

FEATURES

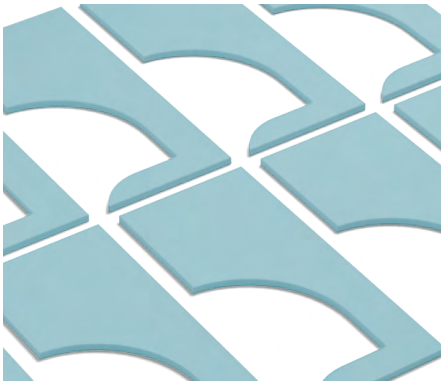
/ Lightweight, Low Density
Thermal conductivity: 3.0 W/m*K
/ Hardness: Shore OO/50
/ Low dielectric constant
/ For high frequency applications
/ Available in a range of thicknesses

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	$>10^{10}$	ASTM D257	Ohm
Volume resistivity	$>10^{10}$	ASTM D257	Ohm-m
Dielectric constant@2GHz D_k	4.115	ASTM D150	-
Dielectric constant@6GHz D_k	4.214	ASTM D150	-
Dielectric constant@10GHz D_k	3.983	ASTM D150	-
Dissipation factor@2GHz D_f	0.00486	ASTM D150	-
Dissipation factor@6GHz D_f	0.00704	ASTM D150	-
Dissipation factor@10GHz D_f	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 Impedance vs. Pressure vs. Deflection