

DTT65-s

5G mmWave Thermal Conductive Gel Pad

LiPOLY DTT65-s is a soft thermal-conductive gel pad specifically designed for network ing communication applications.DTT65-s is designed to focus on D_k and D_f to reduce interference in RF modules. DTT65-s has a thermal conductivity of 5.0 W/m·K. This product can be supplied as standard sheets, custom die-cuts or custom molded parts making it suitable for a wide range of applications.

FEATURES

- / Lightweight, Low Density
- Thermal conductivity: 5.0 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	DTT65-s	UNIT	TEST METHOD
Color	Pink	-	Visual
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	mm	ASTM D374
Density	2.1	g/cm ³	ASTM D792
Hardness	55	Shore OO	ASTM D2240
Water absorption	0.005	%	ASTM D570
Application temperature	-60~180	°C	-
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	8	%	ASTM D5470 modify
Deflection @20 psi	11	%	ASTM D5470 modify
Deflection @30 psi	16	%	ASTM D5470 modify
Deflection @40 psi	21	%	ASTM D5470 modify
Deflection @50 psi	26	%	ASTM D5470 modify
ELECTRICAL			
Dielectric breakdown	10	KV/mm	ASTM D149
Surface resistivity	$>10^{12}$	Ohm	ASTM D257
Volume resistivity	$>10^{13}$	Ohm-m	ASTM D257
Dielectric constant@2GHz D_k	4.131	-	ASTM D150
Dielectric constant@6GHz D_k	4.058	-	ASTM D150
Dielectric constant@10GHz D_k	4.013	-	ASTM D150
Dissipation factor@2GHz D_f	0.00509	-	ASTM D150
Dissipation factor@6GHz D_f	0.00658	-	ASTM D150
Dissipation factor@10GHz D_f	0.00780	-	ASTM D150
THERMAL			
Thermal conductivity	5.0	W/m·K	ASTM D5470
Thermal impedance@10 psi	0.350	°C-in ² / W	ASTM D5470
Thermal impedance@20 psi	0.342	°C-in ² / W	ASTM D5470
Thermal impedance@30 psi	0.323	°C-in ² / W	ASTM D5470
Thermal impedance@40 psi	0.302	°C-in ² / W	ASTM D5470
Thermal impedance@50 psi	0.281	°C-in ² / W	ASTM D5470

Thermal Impedance vs. Pressure vs. Deflection

