

# TEM96D

# **Thermal Conductive RF Absorber Pad**



LiPOLY TEM96D is a thermally conductive absorber based upon soft magnetic materials dispersed in a polymeric resin. It has a thermal conductivity of 5.0 W/m\*K and dissipates electromagnetic radiation rapidly to mitigate against EMI issues.

## **FEATURES**

- / Thermal conductivity: 5.0 W/m\*K
- / Excellent absorption characteristics
- / Naturally tacky
- / Reworkable

## **TYPICAL APPLICATION**

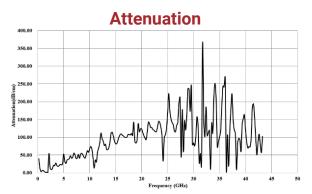
- / IC, CPU, MOS, LED, M/B, Heat sink / LCD-TV, Notebook PC, PC, Telecom device, Wireless hub
- / DDR II module, DVD applications, Hand-set applications
- / 5G base station & infrastructure

#### SPECIFICATIONS

- / Sheet form
- / Die-cut parts

#### FREQUENCY APPLICATION

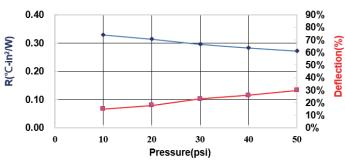
2.4 GHz Wi-Fi Router , Bluetooth
3.5 GHz 5G Mobile Networks
5.0 GHz Wi-Fi Router
12~18 GHz Low Earth Orbit (LEO) System
28 GHz 5G Mobile Networks
39 GHz 5G Mobile Networks



#### **TYPICAL PROPERTIES**

PROPERTY	TEM96D	TEST METHOD	UNIT
Color	Dark Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.6	ASTM D792	g/cm³
Hardness	65	ASTM D2240	Shore OO
TML	0.04	By LiPOLY	%
Water absorption	0.04	ASTM D570	%
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	14	ASTM D5470 modify	%
Deflection @20 psi	18	ASTM D5470 modify	%
Deflection @30 psi	22	ASTM D5470 modify	%
Deflection @40 psi	26	ASTM D5470 modify	%
Deflection @50 psi	29	ASTM D5470 modify	%
EMI Attenuation @1.0mm			
EMI attenuation@ 2.4 GHz	18.9	ASTM D4935 modify	dB/cm
EMI attenuation@ 3.5 GHz	27.4	ASTM D4935 modify	dB/cm
EMI attenuation@ 5.0 GHz	52.6	ASTM D4935 modify	dB/cm
EMI attenuation@ 12 GHz	111.6	ASTM D4935 modify	dB/cm
EMI attenuation@ 18 GHz	110.5	ASTM D4935 modify	dB/cm
EMI attenuation@ 28 GHz	58.9	ASTM D4935 modify	dB/cm
EMI attenuation@ 39 GHz	60.0	ASTM D4935 modify	dB/cm
ELECTRICAL			
Surface resistivity	>1011	ASTM D257	Ohm
Volume resistivity	>1010	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.329	ASTM D5470	°C-in²/ W
Thermal impedance@20 psi	0.314	ASTM D5470	°C-in²/ W
Thermal impedance@30 psi	0.296	ASTM D5470	°C-in²/ W
Thermal impedance@40 psi	0.283	ASTM D5470	°C-in²/ W
Thermal impedance@50 psi	0.272	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 guaranteed. This document does not guarantee the performance and quality required for the purchaser's specific ourpose. The purchaser needs to evaluate and verify the performance of the product and series' 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 orconsequential 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 (minished upon request. All inplut 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