

# NT94-s

## Non-Silicone Thermal Conductive RF Absorber Pad

LiPOLY NT94-s is a thermally conductive absorber based upon soft magnetic materials dispersed in a non-silicone resin. It has a thermal conductivity of 4.0 W/m\*K and dissipates electromagnetic radiation rapidly to mitigate against EMI issues.

### ■ FEATURES

- / Thermal conductivity: 4.0 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
- / EV electric vehicle

### ■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

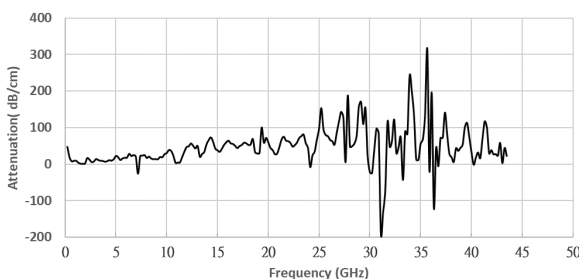
### ■ FREQUENCY APPLICATION

- 2.4 GHz Wi-Fi Router , Bluetooth
- 3.5 GHz 5G Mobile Networks
- 5.0 GHz Wi-Fi Router
- 6.0 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	NT94-s	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/cm <sup>3</sup>
Hardness	65	ASTM D2240	Shore OO
Application temperature	-60~125	-	°C
ROHS & REACH	Compliant	-	-
<b>COMPRESSION@1.0mm</b>			
Deflection @10 psi	9	ASTM D5470 modify	%
Deflection @20 psi	25	ASTM D5470 modify	%
Deflection @30 psi	50	ASTM D5470 modify	%
Deflection @40 psi	69	ASTM D5470 modify	%
Deflection @50 psi	80	ASTM D5470 modify	%
<b>EMI Attenuation @1.0mm</b>			
EMI attenuation@ 2.4 GHz	12	ASTM D4935 modify	dB/cm
EMI attenuation@ 3.5 GHz	9	ASTM D4935 modify	dB/cm
EMI attenuation@ 5.0 GHz	22	ASTM D4935 modify	dB/cm
EMI attenuation@ 6.0 GHz	18	ASTM D4935 modify	dB/cm
EMI attenuation@ 12 GHz	47	ASTM D4935 modify	dB/cm
EMI attenuation@ 18 GHz	53	ASTM D4935 modify	dB/cm
EMI attenuation@ 28 GHz	118	ASTM D4935 modify	dB/cm
EMI attenuation@ 39 GHz	49	ASTM D4935 modify	dB/cm
<b>ELECTRICAL</b>			
Surface resistivity	>10 <sup>12</sup>	ASTM D257	Ohm
Volume resistivity	>10 <sup>11</sup>	ASTM D257	Ohm-m
<b>THERMAL</b>			
Thermal Conductivity	4.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.463	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@20 psi	0.392	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@30 psi	0.274	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@40 psi	0.184	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@50 psi	0.128	ASTM D5470	°C-in <sup>2</sup> / W

### Attenuation



### Thermal Resistance vs. Pressure vs. Deflection

