

# DTT18-s

## Thermal Conductive RF Absorber Putty

LiPOLY DTT18-s is a single-component dispensable thermal EMI-absorbing material formulated by uniformly dispersing soft magnetic fillers in a polymer resin matrix, combining effective heat conduction and electromagnetic wave absorption to convert electromagnetic radiation into heat and dissipate it rapidly, thereby reducing EMI and improving system stability and reliability; it offers a thermal conductivity of 5.0 W/m\*K and features excellent flexibility and conformability, allowing it to fill micro gaps and irregular surfaces, compensate for assembly tolerances, and enhance interfacial thermal performance.

### ■ FEATURES

- / Thermal conductivity: 5.0 W/m\*K
- / Excellent electromagnetic wave absorption capability, effectively reducing EMI
- / High flexibility and conformability, filling microscopic gaps
- / Reduces contact thermal resistance, improving heat dissipation efficiency
- / Good application stability, preventing overflow and drying issues
- / Suitable for high-compression and low-stress applications

### ■ 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

### ■ CONFIGURATIONS

- / Cartridges: 30ml, 55ml, 330ml
- / Bucket: 1kg, 25kg

### ■ PRESERVATION

It can be preserved for 60 months under the condition of unopened and under room temperature 30°C.



### ■ TYPICAL PROPERTIES

PROPERTY	DTT18-s	TEST METHOD	UNIT
Color	Dark Gray	Visual	-
Resin base	Silicone	-	-
Viscosity	6500	DIN 53018	Pa.s
Flow Rate (30cc EFD tube, 2.35mm Orifice diameter, 90psi&60s)	14	By LiPOLY	g/min
Density	3.6	ASTM D792	g/cm <sup>3</sup>
Application temperature	-60~180	-	°C
Bond line thickness	100~1500	-	µm
Shelf life	60 months	-	-
ROHS & REACH	Compliant	-	-
<b>EMI Attenuation @1.0mm</b>			
EMI attenuation@ 2.4 GHz	30.6	ASTM D4935 modify	dB/cm
EMI attenuation@ 3.5 GHz	27.5	ASTM D4935 modify	dB/cm
EMI attenuation@ 5.0 GHz	44.7	ASTM D4935 modify	dB/cm
EMI attenuation@ 6.0 GHz	46.2	ASTM D4935 modify	dB/cm
EMI attenuation@ 12 GHz	80.5	ASTM D4935 modify	dB/cm
EMI attenuation@ 18 GHz	99.8	ASTM D4935 modify	dB/cm
EMI attenuation@ 28 GHz	94.3	ASTM D4935 modify	dB/cm
EMI attenuation@ 39 GHz	66.6	ASTM D4935 modify	dB/cm
<b>ELECTRICAL</b>			
Dielectric breakdown	12	ASTM D149	KV/mm
Volume resistivity	>10 <sup>13</sup>	ASTM D257	Ohm-m
<b>THERMAL</b>			
Thermal conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10psi / 60°C	0.093	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@30psi / 60°C	0.082	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@50psi / 60°C	0.078	ASTM D5470	°C-in <sup>2</sup> / W

