

Description

LST-TIN-521 is a thermally conductive insulation material designed for insulation application. Widely used in applications requiring high thermal heat dissipation performance and electrical insulation. These applications typically have low mounting pressure for clamping. It combines a smooth and highly compliant surface characteristic with high thermal conductivity. This feature optimize the thermal resistance properties at a relative low pressure and good high dielectric.



Features and Benefits

- LTI* : 0.000394 K-m²/W (@50 psi)
- High Dielectric Performance
- Low Mounting Pressure
- Smooth and Highly Compliant Surface
- UL 94V-0 Compliant
- Environment Friendly
- General Purpose Thermal Interface Material

* = Low Thermal Impedance

Typical Applications

- @ Switch-Mode Power Supply
- @ UPS Unit
- @ Amplifier Component Heat Dissipation
- @ Automotive Electronics
- @ Metal Heat Sink or Spreader
- @ Applications with High Heat Generated
- @ Applications required Insulation
- @ Power Semiconductors

Properties

Note : Below technical data and information should be thought as typical or representative only and should not be use for specification purpose.

TYPICAL PROPERTIES OF THERMAL INSULATOR LST-TIP-521

PROPERTY	IMPERIAL VALUE	METRIC VALUE	REFERENT STANDARD
Color	Pink	Pink	Visual
Reinforcement Carrier	Fiberglass	Fiberglass	N/A
Thickness (mils)/(mm)	9	0.23	ASTM D374
Hardness (Shore A)	89	89	ASTM D2240
Tensile Strength (psi)/(Mpa)	1300	9	ASTM D1000
Continous Use Temp (°F)/(°C)	-76 to 356	-60 to 180	N/A
ELECTRICAL			
Dielectric Breakdown Voltage (Vac)	6000	6000	ASTM D149
Volume Resistivity (Ω-meter)	1.1x10 ¹²	1.1x10 ¹²	ASTM D257
Flame Rating	V-O	V-O	UL94
THERMAL			
Thermal Conductivity (W/m-K)	1.6	1.6	ASTM5470

THERMAL PERFORMANCE vs PRESSURE

Pressure (psi)	5	10	25	50	60	80	100
Thermal Impedance (K-m ² /W)	0.000671	0.000632	0.000503	0.000394	0.000323	0.000303	0.000290
Thermal Impedance (°C-in ² /W)	1.040	0.980	0.780	0.610	0.500	0.470	0.450
Compression Rate (%)	4%	8%	13%	15%	16%	17%	17%

Part-Number Ordering System : LST-TIN-521-x.xx-

Blank = Non Adhesive

AC = Adhesive Coated

Standard Thickness = 0.23mm

LISAT

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