

Description

LISAT LST-TIN-523 is another material in the thermally conductive insulation family. It is designed for a range of applications requiring high thermal performance and electrical isolation components. These applications typically have low mounting pressure. The LST-TIN-523 uses a tailored polyimide film carrier. It combines a smooth and highly compliant surface characteristic with high thermal conductivity. These features optimize the thermal resistance properties at relative low pressure.



Features and Benefits

- LTI* : 0.000310 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

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

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-523

PROPERTY	IMPERIAL VALUE	METRIC VALUE	REFERENT STANDARD
Color	Pink	Pink	Visual
Reinforcement Carrier	Polymide	Polymide	N/A
Thickness (mils)/(mm)	6	0.15	ASTM D374
Hardness (Shore A)	89	89	ASTM D2240
Tensile Strength (psi)/(Mpa)	5000	34	ASTM D1000
Continous Use Temp (°F)/(°C)	-76 to 356	-60 to 180	N/A
ELECTRICAL			
Dielectric Breakdown Voltage (Vac)	7000	7000	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)	1.0	1.0	ASTM5470

THERMAL PERFORMANCE vs PRESSURE

Pressure (psi)	5	10	25	50	60	80	100
Thermal Impedance (K-m ² /W)	0.000716	0.000677	0.000563	0.000310	0.000249	0.000470	0.000245
Thermal Impedance (°C-in ² /W)	1.110	1.050	0.870	0.480	0.390	0.380	0.380
Compression Rate (%)	3%	7%	12%	13%	14%	15%	15%

Part-Number Ordering System : LST-TIN-523-x.xx-

Blank = Non Adhesive

AC = Adhesive Coated

Standard Thickness = 0.15mm

LISAT

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