



Honeywell LTM6300-SP Printable Thermal Interface Material

Honeywell LTM6300-SP Printable Thermal Interface Material for LED/LCD Applications

high thermal conductivity phase
change material formulated for
LED/LCD

benefits

- High Thermal Conductivity
- Ease of application
- Superior handling and reworkability
- Application: Screen/Stencil Printable
- More applications per kilogram due to lower specific gravity
- Superior reliability performance

overview

Honeywell LTM6300-SP thermal interface material is a new product specifically formulated for LED/LCD applications. The patented* material was designed for application by screen or stencil printing. It has a tailored filler size that provides exceptional performance. LTM6300-SP thermal interface material changes phase at 45°C to ensure maximum surface conformance and hence minimal contact resistance. Use of LTM6300 material provides longer life, brighter lights and more stable color in LED/LCD devices.

material characteristics*

Physical Properties

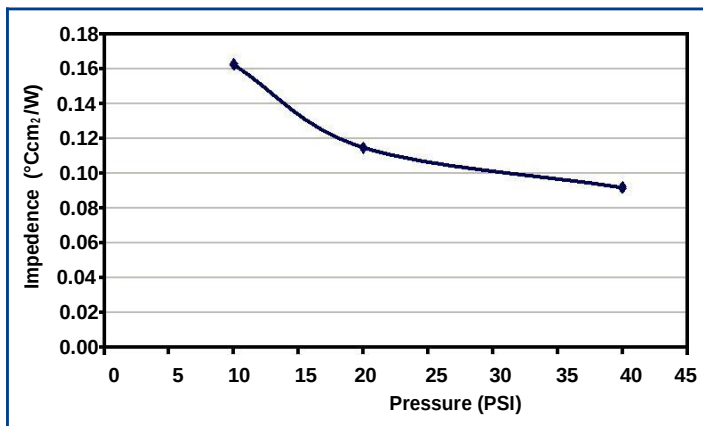
(2 mil shim @ 40 PSI)	LTM6300	
Thermal Conductivity	≥2.03	W/m°C
Thermal Impedance	≤0.40	°C cm²/W
Volume Resistivity	≥3.0x10 ¹⁵	Ωcm
Viscosity	<150,000	cps
Specific Gravity	1.8	g/cm³



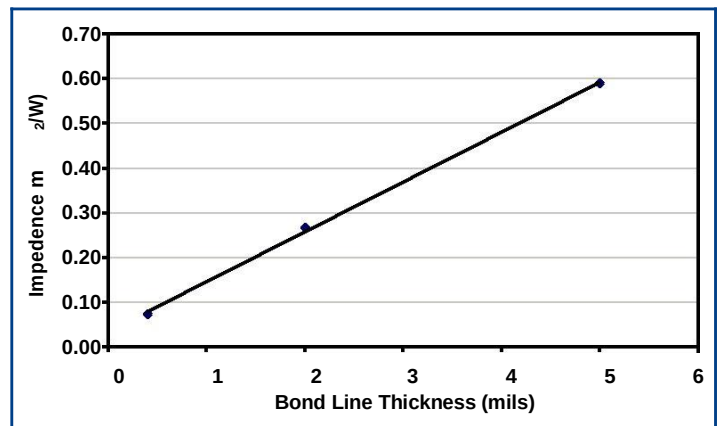
LTM6300-SP can be packaged in jars or cans.

*Data shown is based on preliminary study of the product. Further engineering data will be collected during development to reflect performance in production batch modes.

Thermal Impedance vs. Pressure



Thermal Impedance vs. Bond Line Thickness



Thermal Impedance Post Reliability

(Bond Line Thickness of 2mil)	LTM6300-SP
End of Line	0.25°C cm²/W
1000 cycles T/C "B"	0.17°C cm²/W
1000 hrs @ 85°C & 85%RH	0.23°C cm²/W
96 hrs HAST	0.23°C cm²/W
1000 hrs @ 150°C	0.18°C cm²/W



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