

Liqui-Form® 3500

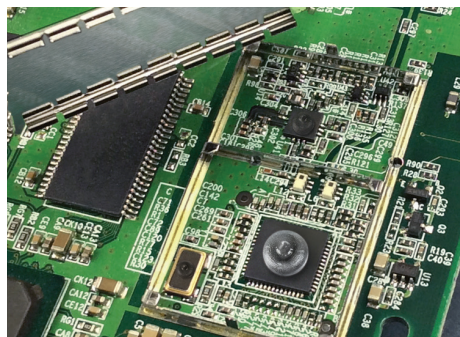
February 2016

PRODUCT DESCRIPTION

Thermally Conductive, One-Part,
Liquid Formable Gel Material

FEATURES AND BENEFITS

- Thermal Conductivity: 3.5 W/m-K
- Dispensable pre-cured gel
- Stable viscosity in storage and in the application
- Excellent chemical stability and mechanical stability



Liqui-Form® 3500 is a high conductivity gel thermal interface material designed for demanding applications that require a balance between dispensability and low component stress during assembly and also in the application.

Liqui-Form® 3500 is a one-part, highly conformable gel with thixotropic properties. The material is precured and requires no curing, mixing or refrigeration. It's unique formulation assures excellent thermal performance, low applied stress and reliable long-term performance.

Liqui-Form® 3500 is thixotropic with a natural tack ensuring it will stay in place within the application.

Note: To build a part number, visit our website at www.bergquistcompany.com.

TYPICAL PROPERTIES OF LIQUI-FORM 3500

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD	
Color	Gray	Gray	Visual	
Dispense Rate (Grams/min) (1)	40	40	Henkel Test	
Volumetric Expansion (25 to 275°C), ppm/K	200	200	ASTM E228 modified	
Outgassing, % Total Mass Loss	0.14	0.14	ASTM E595	
Density (g/cc)	3.1	3.1	ASTM D792	
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—	
Shelf Life at 25°C (Months)	6	6	—	
ELECTRICAL				
Dielectric Strength (V/mil)/(V/mm)	250	10,000	ASTM D149	
Dielectric Constant (1000 Hz)	8.1	8.1	ASTM D150	
Volume Resistivity (Ohm-meter)	10 ¹¹	10 ¹¹	ASTM D257	
Flame Rating	V-O	V-O	U.L. 94	
THERMAL				
Thermal Conductivity (W/m-K)	3.5	3.5	ASTM D5470	
THERMAL PERFORMANCE vs. PRESSURE				
	Pressure (PSI)	10	25	50
	Thermal Impedance (°C-in ² /W) (2)	0.07	0.07	0.06

(1) 30cc syringe, 90 psi (621 kPa), 0.100" orifice no attachment.

(2) The ASTM D5470 test fixture was utilized. The recorded values include the interfacial thermal resistance. The values are provided for reference only. Actual application performance is directly related to the surface roughness, flatness and pressure applied.

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TYPICAL APPLICATIONS INCLUDE

- Handheld devices
- Bare die to heat spreader lid
- Filling various gaps between heat-generating devices to heat sinks and housings
- Devices requiring low assembly pressure
- High value assemblies with rework
- BGA, PGA, PPGA

CONFIGURATIONS AVAILABLE

- Supplied in 30cc, 150cc, 300cc, 600cc cartridges or 4.3 gallon pails

Disclaimer

Note:

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