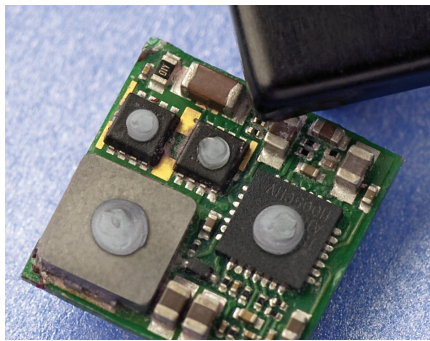


Liqui-Form™ 2000

Thermally Conductive, One-Part, Liquid Formable Material

Features and Benefits

- Thermal Conductivity: 2.0 W/m-K
- Applies very low force on components during assembly
- Low volumetric expansion
- Excellent chemical and mechanical stability even at higher temperatures
- No curing required
- Stable viscosity in storage and in the application



Liqui-Form™ 2000 is a high thermal conductivity liquid formable material designed for demanding applications requiring a balance between dispensability, low component stresses during assembly and ease of rework.

Liqui-Form™ 2000 is a highly conformable shear-thinning material which requires no curing, mixing or refrigeration. Its unique formulation assures excellent thermal performance, low applied stress and reliable long-term performance. Liqui-Form™ 2000 is thixotropic and has a natural tack ensuring it forms around the component and stays in place in the application.

TYPICAL PROPERTIES OF LIQUI-FORM 2000				
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD	
Color	Gray	Gray	Visual	
Low Shear Viscosity (Pa*sec)@ 0.01 sec-1 (1)	20,000	20,000	ASTM D4473	
High Shear Viscosity (Pa*sec)@ 300 sec-1 (2)	110	110	ASTM D2196	
Volumetric Expansion (25 to 275°C), ppm/K	600	600	ASTM E228 modified	
Outgassing, % Total Mass Loss	0.53	0.53	ASTM E595	
Density (g/cc)	2.8	2.8	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)	8.0	8.0	ASTM D150	
Volume Resistivity (Ohm-meter)	10 ⁹	10 ⁹	ASTM D257	
Flame Rating	V-O	V-O	U.L. 94	
THERMAL				
Thermal Conductivity (W/m-K)	2.0	2.0	ASTM D5470	
THERMAL PERFORMANCE vs. PRESSURE				
	Pressure (PSI)	10	25	50
	Thermal Impedance (°C-in ² /W) (3)	0.13	0.12	0.12

(1) Parallel Plate Rheometer; See Product Management Liqui-Form Application Note.
 (2) Capillary Rheometer; See Product Management for Viscosity and Dispensing Application Note
 (3) 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.

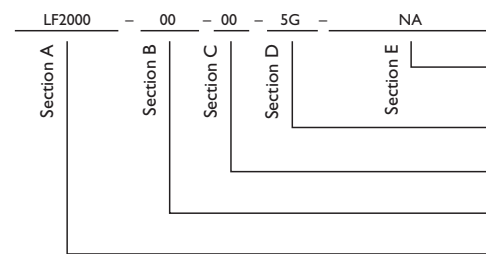
Typical Applications Include:

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

Configurations Available:

- Supplied in 30cc or 600cc cartridges or 5 gallon pails

Building a Part Number



Standard Options

◀ example

NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.

Cartridges: 30cc = 30.0cc, 600cc = 600.0cc
 Pails: 5G = 5 gallon

00: No options

00 = No spacer beads
 07 = 0.007" spacer beads

LF2000 = Liqui-Form 2000 Material

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



www.bergquistcompany.com

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