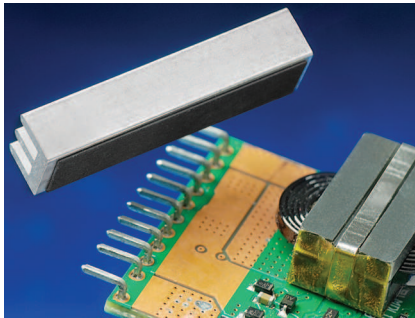


Liqui-Bond® SA 1800 (One-Part)

Thermally Conductive, One-Part, Liquid Silicone Adhesive

Features and Benefits

- High thermal conductivity: 1.8 W/m-K
- Eliminates need for mechanical fasteners
- Low viscosity for ease of screening or stenciling
- Maintains structural bond in severe-environment applications
- Heat cure



Liqui-Bond SA 1800 is a high performance, liquid silicone adhesive that cures to a solid bonding elastomer. The adhesive is supplied as a one-part liquid component, offered in a tube or mid-size container.

Liqui-Bond SA 1800 features a combination of high thermal conductivity with a low viscosity which allows for ease of screen or stencil application. This material is also ideal for high volume automated pattern dispensing. Liqui-Bond SA 1800's low viscosity allows the material to achieve a very thin bond line, producing excellent thermal performance and a high shear strength.

Liqui-Bond SA 1800's mild elastic properties assist in relieving CTE stresses during thermal cycling. The material cures at elevated temperatures and requires refrigeration storage at 10°C. Liqui-Bond SA 1800 is available with optional glass beads to provide a consistent stand-off and ensure dielectric integrity.

TYPICAL PROPERTIES OF LIQUI-BOND SA 1800

| PROPERTY AS SUPPLIED | IMPERIAL VALUE | METRIC VALUE | TEST METHOD |
|--------------------------------------|------------------|------------------|-------------|
| Color | Black | Black | Visual |
| Viscosity (cps) (1) | 125,000 | 125,000 | ASTM D2196 |
| Density (g/cc) | 2.8 | 2.8 | ASTM D792 |
| Shelf Life @ 10°C (months) | 6 | 6 | — |
| PROPERTY AS CURED - PHYSICAL | | | |
| Hardness (Shore A) | 80 | 80 | ASTM D2240 |
| Continuous Use Temp (°F) / (°C) | -76 to 392 | -60 to 200 | — |
| Shear Strength (psi) / (MPa) | 200 | 1.4 | ASTM D1002 |
| PROPERTY AS CURED - ELECTRICAL | | | |
| Dielectric Strength (V/mil) / (V/mm) | 250 | 10,000 | ASTM D149 |
| Dielectric Constant (1000 Hz) | 6.0 | 6.0 | ASTM D150 |
| Volume Resistivity (Ohm-meter) | 10 ¹¹ | 10 ¹¹ | ASTM D257 |
| Flame Rating | V-O | V-O | U.L.94 |
| PROPERTY AS CURED - THERMAL | | | |
| Thermal Conductivity (W/m-K) | 1.8 | 1.8 | ASTM D5470 |
| CURE SCHEDULE | | | |
| Pot Life @ 25°C (hours) (2) | 10 | 10 | — |
| Cure @ 125°C (minutes) (3) | 20 | 20 | — |
| Cure @ 150°C (minutes) (3) | 10 | 10 | — |

1) Brookfield RV, Heli-path, Spindle TF @ 20 rpm, 25°C.
 2) Based on 1/8" diameter bead.
 3) Cure Schedule - time after cure temperature is achieved at the interface. Ramp time is application dependent.

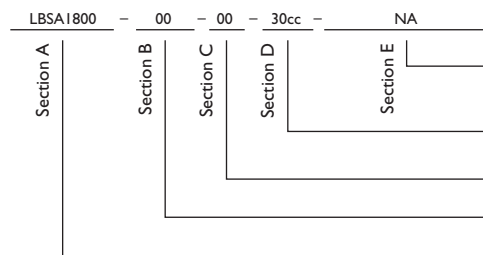
Typical Applications Include:

- PCB assembly to housing
- Discrete component to heat spreader

Configurations Available:

- With or without glass beads

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 (ml)
 Pail: 0.85G = 0.85-gallon, 5G = 5-gallon

00 = No adhesive

00 = No spacer beads

07 = 0.007" spacer beads

LBSA1800 = Liqui-Bond SA 1800 (One-Part)
 Liquid Adhesive Material

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



www.bergquistcompany.com

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