



**AAVID
THERMALLOY**

Aavid Ultrastick™
Phase-Change
Thermal Interface Compound

ULTRASTICK™ PHASE-CHANGE THERMAL INTERFACE COMPOUND

Aavid's Ultrastick™ is a unique phase-change thermal interface material that surpasses grease in thermal performance and long-term stability. This solid, silicone-free, paraffin-based thermal compound changes phase at 60°C, with a concurrent volumetric expansion that fills gaps between the mating surfaces. Ultrastick comes in a convenient applicator bar, allowing for neat, fast application to both heat sink and component surfaces. One cost-effective application leaves a thin, film-like deposit, providing excellent heat transfer and low interface thermal resistance.



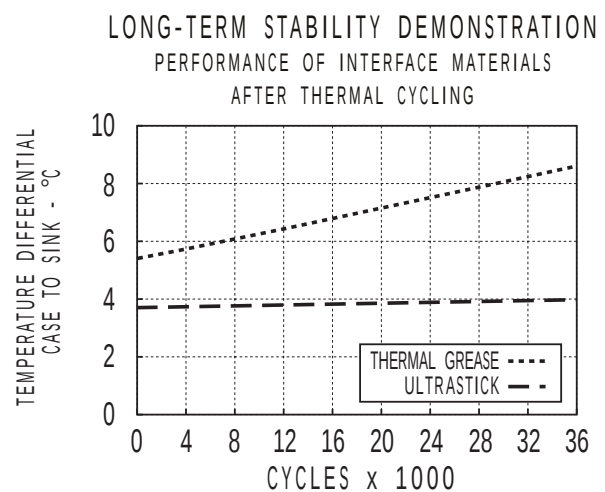
FEATURES:

- Thermal resistance 20% lower than thermal grease, with significant long-term reliability benefits
- Excellent heat transfer properties, consistent at mounting pressures from less than 5 psi to more than 200 psi
- No run-out, migration, dry-out, or flaking that can occur with typical thermal grease
- High-temperature (60°C) phase change simplifies storage and handling
- Non-toxic and inert; Material Safety Data Sheet (MSDS) available upon request
- Electrically nonconductive
- Easy to use and dry to the touch after application, reducing labor costs
- Easily removed for rework

ORDERING INFORMATION:

Part Number	Description
100300F00000	Ultrastick™, 47.5 Gram Bar

THERMAL PERFORMANCE:



EACH CYCLE 40°C TO 90°C - 7 MIN. RISE, 3 MIN. FALL

FOR MORE INFORMATION, VISIT OUR WEB SITE: WWW.AAVIDTHERMALLOY.COM
TEL: (603) 224-9988



AAVID THERMALLOY

Aavid Ultrastick™ Phase-Change Thermal Interface Compound

APPLICATION INSTRUCTIONS

1. Advance compound approximately 3/8" to 1/2" beyond end of dispenser.
2. Hold Ultrastick™ applicator bar with a finger on slide tab and bar at a 45° angle to the interface surface. Apply gentle pressure (approximately 5 lbs. of force) on the bar while moving it across the interface surface. If the area to be coated is wider than the width of the bar, apply a second swipe across uncoated areas. Follow the same procedure for the mating interface surface. Interface surfaces may then be joined and the assembly clamped together per the assembly requirements.
3. The compound may exhibit some degree of voiding. The thermal compound will "cold flow" with the interface joining pressure. Once the assembly experiences a thermal cycle through 60°C (140°F), the thermal compound will flow to fill any remaining voids or air gaps. It is not necessary to reapply additional amounts of compound to attempt to totally cover the interface surface.
4. Each Ultrastick™ bar contains sufficient compound for approximately 1000 in² of surface coverage, when properly applied. If less coverage is being achieved in production, it may be an indicator of excessive compound application. As with traditional thermal grease, an overabundance of interface compound may be counterproductive.



ULTRASTICK™ PROPERTIES:

Properties	Value
Color	Opaque White
Temperature Range	-40°C to +200°C
Thermal Impedance	0.03°C-in ² /W @ 20 psi 0.02°C-in ² /W @ 100 psi
Shelf Life	Indefinite*
Net Weight	22.7 gm (0.8 oz)
Volume Resistivity	1.0 x 10 ¹⁵ Ohm-cm
Dielectric Strength	250 volts/mil
Consistency	Paste
Bleed	0.6 max
Specific Gravity	0.28

* Recommended max. storage temperature: 40°C (105°F)

North America

80 Commercial Street
Concord, NH 03301
TEL: (603) 224-9988
FAX: (603) 223-1790
EMAIL: info@aavid.com

Europe - Italy

Via Aprile, 32
40057 Cadriano (BO), Italy
TEL: (39) 051 764011
FAX: (39) 051 764090
EMAIL: sales.it@aavid.com

Europe - England

Cheney Manor
Swindon
SN2 2QN
England
TEL: 44(0) 1793 401400
FAX: 44(0) 1793 615396
EMAIL: sales.uk@aavid.com

Asia - Taiwan,

14F-4, NO. 79, Hsin Tai Wu RD.
SEC. 1, Hsi Chih
Taipei Hsien
Taiwan
TEL: 011(886) 2-2698-9888
FAX: 011(886) 2-2698-9808

Asia - Singapore

5 Woodlands Industrial Park E1
Singapore 757728
TEL: 65 -6362-8388
FAX: 65-6362-8588

PLEASE NOTE: Our customers are reminded that they bear the responsibility for testing Aavid Thermalloy's products for proposed use. Any information furnished by Aavid Thermalloy is believed to be accurate and reliable, but our customers must bear all responsibility for use and applications of Aavid Thermalloy products. AAVID THERMALLOY MAKES NO WARRANTIES EXPRESSED OR IMPLIED, AS TO THE FITNESS, MERCHANTABILITY, OR SUITABILITY OF ANY AAVID PRODUCTS FOR ANY SPECIFIC OR GENERAL USES. AAVID THERMALLOY SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND. All Aavid Thermalloy products are sold pursuant to the Aavid Thermalloy Domestic Terms and Conditions of Sale in effect from time to time, a copy of which shall be furnished upon request (8911A). Copyright © Aavid Thermalloy, LLC, October 2004. All icons, drawings, illustrations, and trademarks are the property of Aavid Thermalloy, LLC and may not be reproduced without express written permission. (10/2004)

FOR MORE INFORMATION, VISIT OUR WEB SITE: WWW.AAVIDTHERMALLOY.COM
TEL: (603) 224-9988