



HEAT CONDUCTIVE ELECTRICALLY INSULATING COMPOUND Technical Product Bulletin

PRODUCT DESCRIPTION:

AA-BOND 2156 is a thixotropic (smooth paste) thermally conductive epoxy system. It is used for staking heat sinks, transistors, diodes, resistor, integrated circuits and other heat-sensitive components to printed circuit boards.

AA-BOND 2156 is two parts fast cure adhesive develops strong bond to many materials, and its coefficient of thermal expansion provides a good match for the application.

GENERAL INFORMATION:

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

GENERAL PROPERTIES:

Appearance	Tan	
Cure Type	Heat cure or Room Temperature	
	Fast Cure	
	Strong	
Benefit	Durable	
	 High- impact bonds at room 	
	temperature that improves heat	
Mix Ratio by	x Ratio by 100:23 / Resin:Hardener	
weight		
	Bonds readily to itself and to metals, silica,	
Substrates	steatite, alumina, sapphire and other ceramics,	
	glass, plastics and to many other materials	
Typical	Fiber optic bundles, potting glass fibers and fiber	
Applications	optic connectors	

UNCURED PROPERTIES:

Viscosity @ 25 °C	12,000 ±1000 (After Mixing)
Specific Gravity, mixed	2.294
Reactive solids contents, %	100
Pot Life	5 minutes
Shelf life	1 Year

THERMAL PROPERTIES:

Glass transition temperature (Tg),	33°C, 91.4°F
Lap shear strength, psi	3400 (Alum to Alum)
Operating Temperature	-70 to 33 °C
Operating remperature	-94 to 91.4 °F
CTE linear	14.4 μin/in-°F
	@Temperature 68.0 °F
Thormal Conductivity	0.840 W/m-K
	5.83 BTU-in/hr-ft ² -°F

CURE SCHEDULE:

1 Hour	@ 125°C
3 Hours	@ 65°C
24 Hours	@ 25°C

MECHANICAL PROPERTIES:

Hardness, Shore D	79
Adhesive Bond Strength	3400 psi

HOW TO USE:

- **1.** Carefully clean and dry all surfaces to be bonded.
- Apply the AA-BOND 2156 completely mixed adhesive to the prepared surfaces, and gently press these surfaces together. Contact pressure is adequate for strong, reliable bonds; however, maintain contact until adhesive is completely cured.
- **3.** Some separation of components is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use.
- 4. Some ingredients in this formulation provided may crystallize when subjected to low temperature storage. A gentle warming cycle of 52°C for 30 minutes prior to mixing components may be necessary. Crystallized epoxy components do not react as well as liquid components and should be re-dissolved prior to use for best results.

AVAILABILITY

This epoxy can be supplied in many different packages.

Atom Adhesives

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