

AluBond AIW49P

Large Diameter Aluminum Wedge Bonding Wire

Excellent Thermal and Electrical Conductivity

AluBond AIW49P wire has excellent thermal and electrical conductivity and can be used on all heavy wire wedge bonding equipment. While normally supplied in an annealed state, Heraeus can also supply AluBond AIW49P aluminum wedge bonding wire to meet mechanical specifications best suited to your equipment and the looping requirements of your application. Various spool colors are available that enable customization of wire diameter and spool color. Larger traverse dimension on spool allows for 2X wire length resulting in higher UPH.

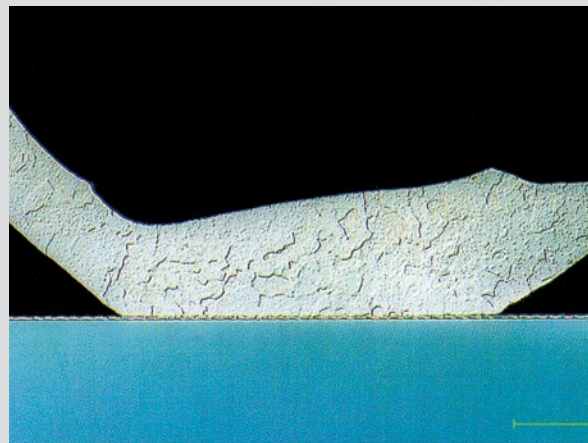


AluBond AIW49P Benefits

- Larger diameters suitable for power packages and discrete devices
- 3mil - 20mil thickness range prevents sag or deflection during molding
- Chemicals and metallurgical behavior compatible with aluminum metallization
- Bondable at temperature and energy levels low enough to avoid damage to sensitive devices
- Enhance corrosion resistance designed for non-hermetically sealed packages

Areas of Application

- Automotive components
- Power components
- Hybrid components
- Transistors / Thyristors
- Battery cell connecting



Recommended Technical Data of AluBond AIW49P

Diameter	Microns	125	150	200	250	300	380	500
	Mils	5	6	8	10	12	15	20
Elongation	(%)	> 5	> 5	> 5	> 10	> 10	> 10	> 10
Breaking Load	(g)	100 - 150	130 - 190	200 - 350	300 - 450	450 - 700	700 - 1100	1200 - 2000

For other diameters, please contact Heraeus Bonding Wires sales representative.

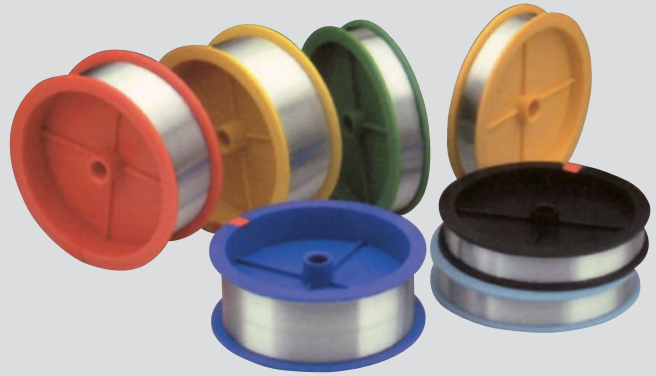
Wire Specification

Chemical Composition

Aluminum	99.99%
Total Impurities:	0.01%

Physical Properties

Density	2.70 g/cm ³
Melting Point	660°C / 1220°F
Electrical Resistivity @20°C	2.7 µW/cm
Thermal Conductivity @20°C	230 W/m.K
Electrical Conductivity @20°C	64% IACS



Americas

Phone +1 610 825 6050
electronics.americas@heraeus.com

Asia Pacific

Phone +65 6571 7649
electronics.apac@heraeus.com

China

Phone +86 53 5815 9601
electronics.china@heraeus.com

Europe, Middle East and Africa

Phone +49 6181 35 4370
electronics.emea@heraeus.com

The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for particular application. The Heraeus logo, Heraeus, AluBond® and the AluBond figurative mark are trademarks or registered trademarks of Heraeus Holding GmbH or its affiliates. All rights reserved.