

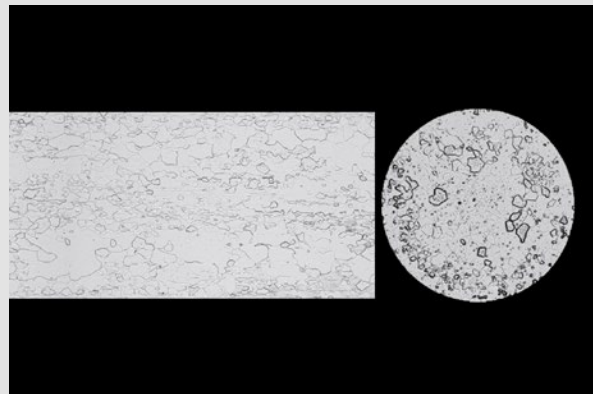
AluBond Pure H11

High Purity Aluminum Wire for Robust Bonding

AluBond Pure H11 wires consist of high purity aluminum with selected addition elements homogeneously distributed in defined concentrations. The AluBond Pure H11 wire fulfils the increasing requirements made on the reliability of bonded connections in automobile and power electronics.

AluBond Pure H11 Benefits

- Defined softness
- Good bending fatigue properties
- Excellent loop stability
- Outstanding bonding properties



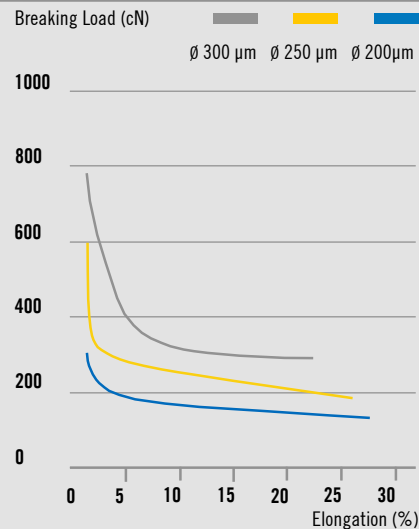
Areas of Application

- Automotive components
- Power components
- Hybrid components
- Transistors / Thyristors

Characteristics of AluBond Pure H11

Melting Point	°C	660
Modulus of rigidity	kN / mm ²	27
Thermal conductivity at 20°C	W / m ² K	230
Linear expansion coefficient (20-30°C)	10 ⁻⁶ K ⁻¹	25.3
Electrical Resistivity at 20°C	μOhm*cm	2.8
Temperature coefficient of electrical resistance (0 - 100°C)	10 ⁻³ K ⁻¹	4.14
Relative electrical conductivity (IACS) at 20°C	%	64.0
Meter resistance at ø 25 μm (20°C)	Ω / m	57.1
Thermal emf against Cu (0°/100°C)	mV	-0.35

Breaking Load vs Elongation

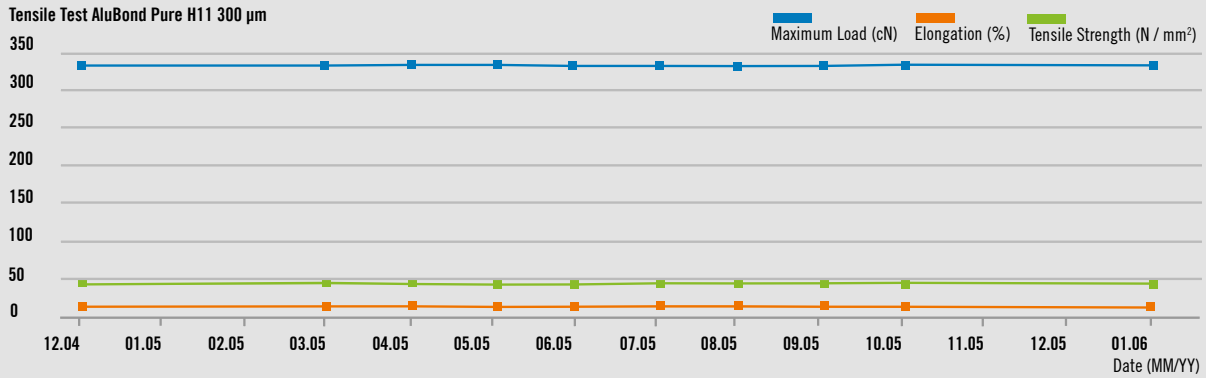


Recommended Technical Data of AluBond Pure H11

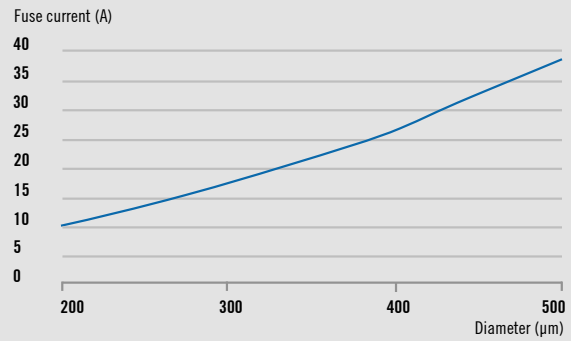
Diameter	Microns	125	200	250	300	380	400	450	500
	Mils	5	8	10	12	15	16	18	20
Elongation	(%)	> 1	> 1	> 1	> 5	> 5	> 5	> 5	> 5
Breaking Load	(cN)	50 - 90	130 - 220	200 - 300	280 - 430	450 - 670	500 - 670	650 - 960	800 - 1200

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

Aluminum Bonding Wire Long-time Behavior



Fuse Current of AluBond Pure H11



Loop length : 20 mm
Ramp : 0.2 A/s

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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.