Heraeus

AluBond Pure High Purity Aluminum Wire for Robust Bonding

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

AluBond Pure Benefits

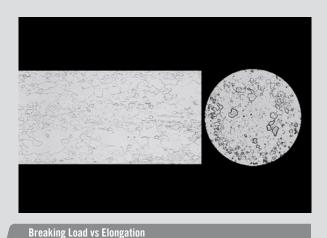
- Defined softness
- Good bending fatigue properties
- Excellent loop stabilityOutstanding bonding properties

Areas of Application

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

Characteristics of AluBond Pure

Melting Point	°C	660
Modulus of rigidity	kN / mm²	27
Thermal conductivitiy at 20°C	W / m*K	230
Linear expansion coefficient (20-30°C)	10 ^{-6*} K ⁻¹	25.3
Electrical Resistivity at 20°C	µ0hm*cm	2.8
Temperature coefficient of electrical resistance (0 - 100°C)	10 ^{-3*} K ⁻¹	4.14
Relative electrical conductivity (IACS) at $20^\circ C$	%	64.0
Meter resistance at Ø 25 µm (20°C)	Ω / m	57.1
Thermal emf against Cu (0°/100°C)	mV	-0.35



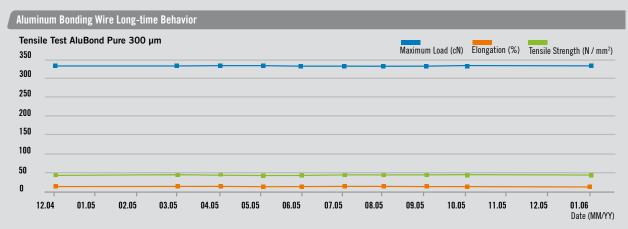
Break	ing Load (cN)			
1000		ø 300 µm	ø 250 µm	ø 200µm
800				
600				
400				
200				
0	0 5 1	0 15	20 25	30
	0 0 1	0 13		30 [%] gation

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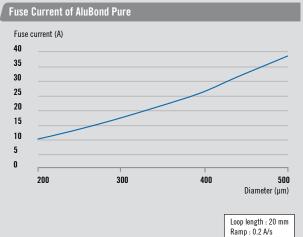
Diameter	Microns	125	200	250	300	380	400	450	500
	Mils	5	8	10	12	15	16	18	20
Elogation	(%)	>1	>1	>1	> 5	> 5	> 5	> 5	> 5
Breaking Load	(cN)	50 - 90	130 - 220	200 - 300	280 - 430	450 - 670	500 - 670	650 - 960	800 - 1200

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

The data given here is valid. We reserve the right to make technical alterations.







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