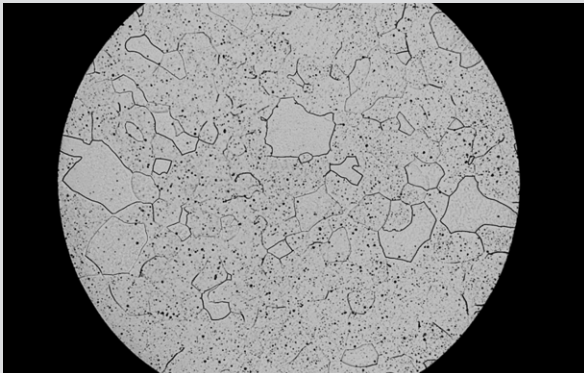


Al-H14 CR Aluminum Bonding Wire for Extended Corrosion Resistance



Al-H14 CR Benefits

- Best corrosion resistance
- Comes in two versions: medium and soft
- Medium performance for high strength requirements
- Soft performance for extra sensible chip bonding and outstanding soft bonding properties
- Available in both, wire & ribbon shape

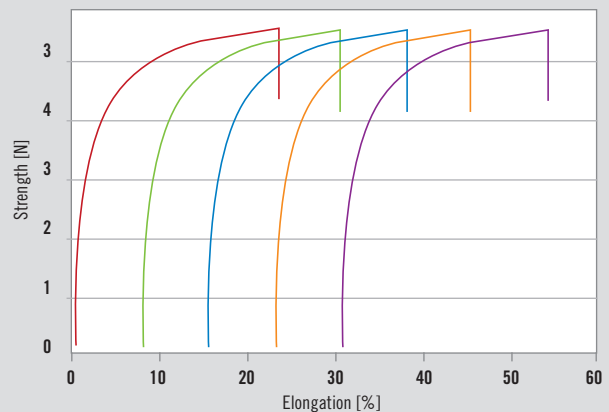
Al-H14 CR wires and ribbons consist of high purity aluminum with selected addition elements homogeneously distributed in defined concentrations. The corrosion resistant Al-H14 CR wire fulfils the increasing requirements made on the reliability of bonded connections in automobile and power electronics.

Areas of Application

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

Serial Tensile Test Result from Soft Al-H14 CR

300 μ m/12 mil



Recommended Technical Data of Al-H14 CR

Diameter	Micron	125	150	175	200	250	300	375	400	500
	Mil	5	6	7	8	10	12	15	16	20
Medium	Elongation [%]	> 10	> 10	> 10	> 15	> 15	> 15	> 15	> 15	> 15
	Breaking Load [cN]	75–120	100–180	140–230	200–290	300–450	450–650	700–1050	750–1200	1150–1850
Soft	Elongation [%]				> 10	> 10	> 10	> 10	> 10	> 10
	Breaking Load [cN]				140–200	220–300	320–420	475–675	550–750	850–1150

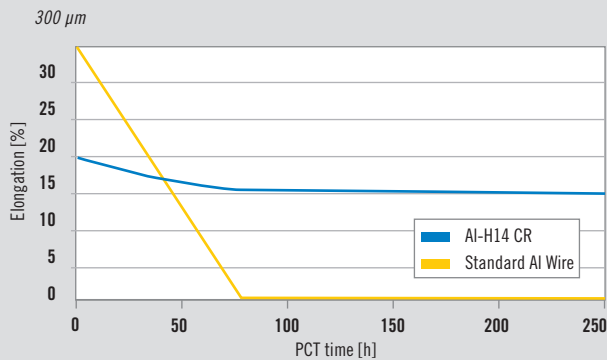
For other diameters, please contact Heraeus Electronics Product Management

Characteristics of Al-H14 CR

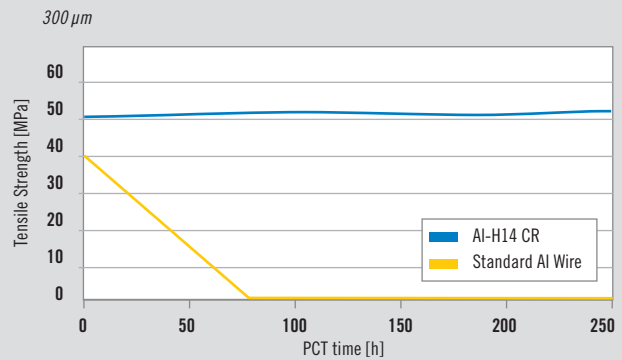
Melting Point	°C	660
Modulus of rigidity	kN / mm ²	27
Thermal conductivity at 20°C	W / m-K	230
Linear expansion coefficient (20 – 30°C)	10 ⁻⁶ -K ⁻¹	25.3
Electrical Resistivity at 20°C	μΩm-cm	2.8
Temperature coefficient of electrical resistance (0 – 100°C)	10 ⁻³ -K ⁻¹	4.14
Relative electrical conductivity (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



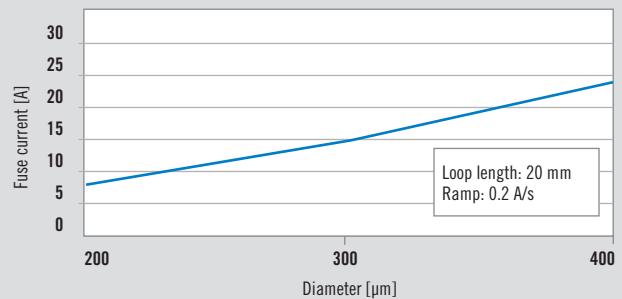
Pressure Cooker Test



Pressure Cooker Test



Fuse Current of Al-H14 CR



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