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AluBond Prime H14CR

Aluminum Bonding Wire for Extended Corrosion Resistance



AluBond Prime H14CR wires and ribbons consist of high purity aluminum with selected addition elements homogeneously distributed in defined concentrations. The corrosion resistant AluBond Prime H14CR 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

AluBond Prime H14CR Benefits

- Best corrosion resistance
- Comes in two versions: medium and soft
- Soft performance for extra sensible chip bonding and outstanding soft bonding properties

Serial Tensile Test Result from Soft AluBond Prime H14CR 300 µm/12 mil



Recommended Technical Data of AluBond Prime H14CR									
Diameter	Micron	125	200	250	300	380	400	500	
	Mil	5	8	10	12	15	16	20	
Medium	Elongation [%]	> 10	> 15	> 15	> 15	> 15	> 15	> 15	
	Breaking Load [cN]	75-120	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

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Characteristics of AluBond Prime H14CR							
Melting Point	°C	660					
Modulus of rigidity	kN / mm²	27					
Thermal conductivity at 20°C	W / m [*] K	230					
Linear expansion coefficient ($20 - 30^{\circ}$ C)	10 ^{-6·} K ⁻¹	25.3					
Electrical Resistivity at 20°C	µOhm*m	2.8					
Temperature coefficient of	10 ⁻³ ·K ⁻¹	4.14					
electrical resistance (0 $-$ 100°C)							
Relative electrical conductivity (IACS) at 20 $^\circ\mathrm{C}$	%	64.0					
Meter resistance at ø 25 µm (20°C)	Ω/m	57.1					



Loop length : 20 mm Ramp : 0.2 A/s



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