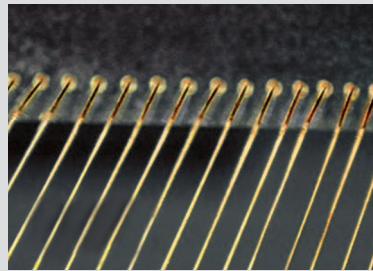
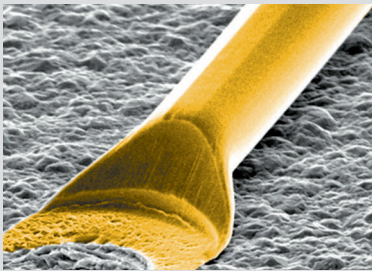


Au HD2 4N Gold Bonding Wire for Universal Use



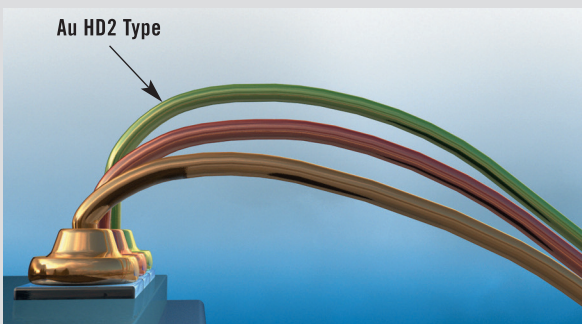
Au HD2 Benefits

- Universal wire
- Soft type bonding wire of high ductility
- Exact loop guiding
- High loop stability
- Good thermal stability
- Suitable for all high performance bonding machines
- For normal and high speed assembling

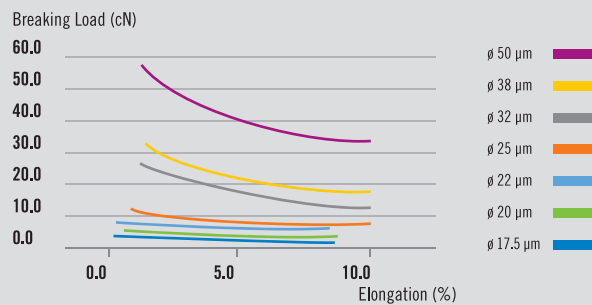
The HD2 type, doped with a few ppm beryllium, is a standard wire for most modern bonding technologies in normal and high speed ranges. Due to its high loop stability, elevated temperature strength and ductility it can be used in most currently utilized components.

Areas of application

- Discrete components (SOT, TO, ...)
- Integrated circuits (P-DIP, PLCC, SOIC, QFP, ...)
- COB (Chip-on-board)



Breaking Load vs. Elongation



Recommended Technical Data of Au HD2

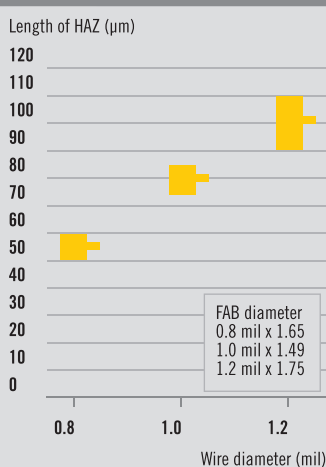
Diameter	Microns (μm)	17.5	20	23	25	30	33	38	50
	Mils	0.7	0.8	0.9	1.0	1.2	1.3	1.5	2.0
Elongation	%	2 – 5	2 – 6	2 – 8	2 – 8	3 – 8	3 – 8	3 – 8	3 – 8
Breaking Load	cN	> 4	> 5	> 6	> 8	> 10	> 11	> 15	> 30

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

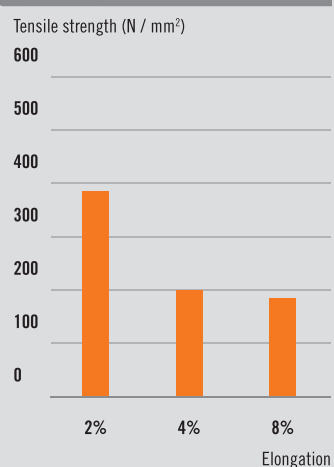
HD2 Characteristics for 25 µm diameter

Non-Gold Elements	< 100 ppm	Heat Conductivity	3.12 W / cm-K
Elastic Modulus	> 60 GPa	Electrical Resistivity	2.3 µΩ-cm
Heat Affected Zone (HAZ)	190 – 230 µm	Coeff. of Linear Expansion (20 – 100 °C)	14.2 ppm / K
Melting Point	1063 °C	Fusing Current for 25 µm, dia 10 mm length (in air)	0.369 A
Density	19.32 g / cm³		

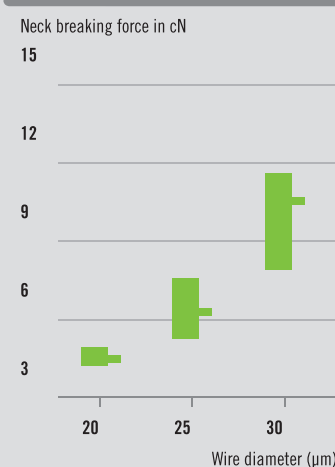
Heat Affected Zone (HAZ)



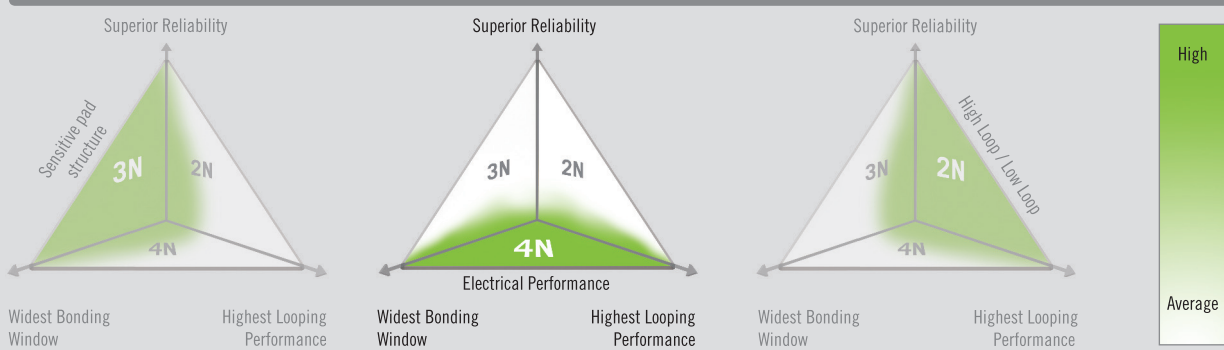
Breaking Load vs. Elongation



Neck Strength



Gold Wire Segmentation by Properties



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

Asia Pacific
Phone +65 65717649
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, Condura®, DTS®, Die Top System® and the Condura, DTS, Die Top System figurative mark are trademarks or registered trademarks of Heraeus Holding GmbH or its affiliates. All rights reserved.