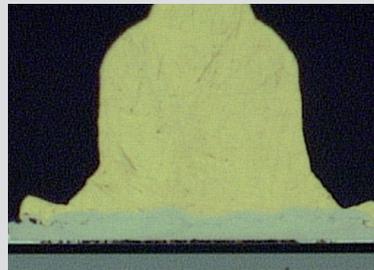
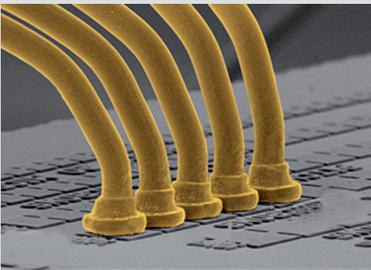


Au HD3 Gold Bonding Wire for Universal Use and Low Loop



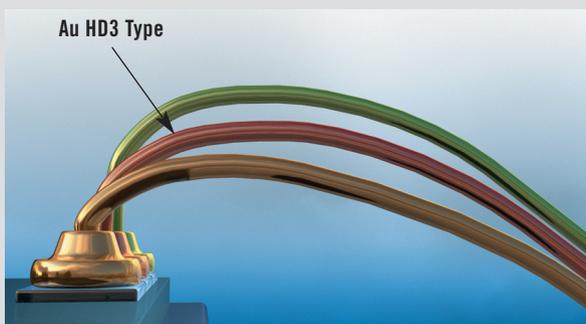
This wire type contains other doping elements apart from the well established beryllium. Due to this doping, type HD3 has a higher strength, loop stiffness and thermal stability than type HD2. Loop stability can also be guaranteed with thinner wire diameters and in flatter and/or long loops.

Areas of application

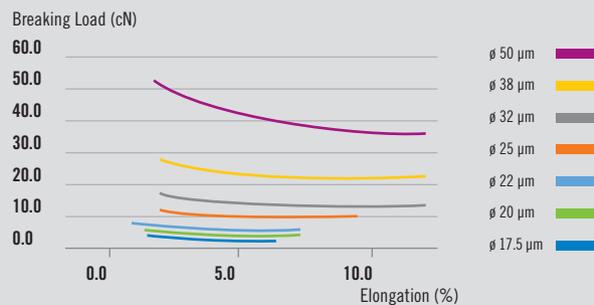
- Flat integrated circuits (TSOP, TQFP, VSSOP, IC-cards,...)
- Other flat product applications

Au HD3 Benefits

- Low loop wire type
- Soft type bonding wire of high ductility
- Exact loop guiding
- Mid strength type
- Well proven loop stiffness and thermal stability
- Suitable for all high performance bonding machines
- For normal and high speed assembling



Breaking Load vs. Elongation



Recommended Technical Data of Au HD3

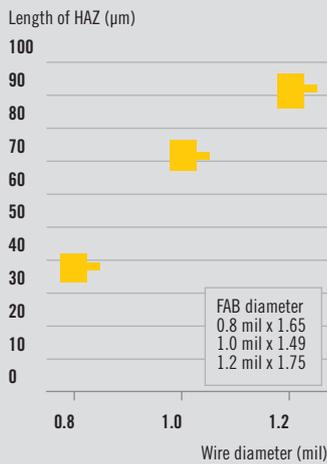
Diameter	Microns (µm)	17.5	20	23	25	30	33	38	50
	Mils	0.7	0.8	0.9	1.0	1.2	1.3	1.5	2.0
Elongation	%	2-5	2-6	2-7	2-8	3-8	3-8	3-10	3-12
Breaking Load	cN	> 4	> 5	> 7	> 9	> 13	> 16	> 21	> 34

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

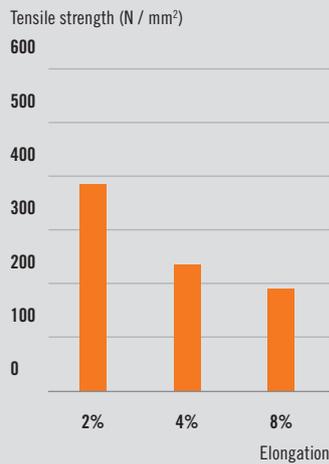
HD3 Characteristics for 25 µm diameter

Non-Gold Elements	< 100 ppm	Heat Conductivity	3.12 W / cmK
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 / cm ³		

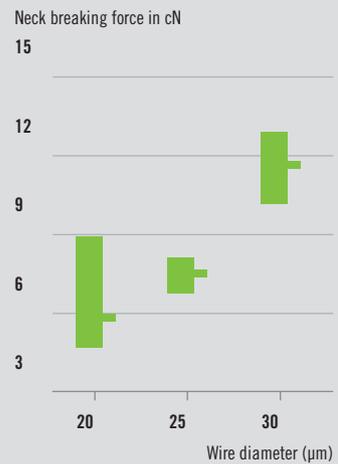
Heat Affected Zone (HAZ)



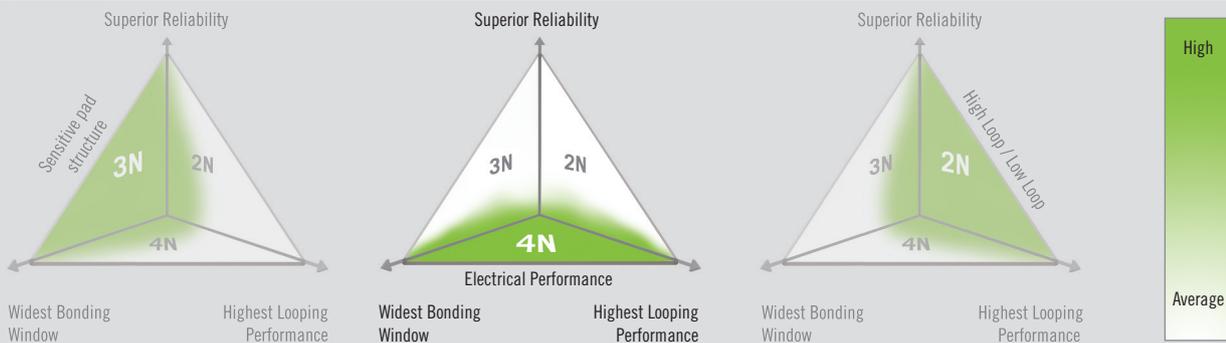
Breaking Load vs. Elongation



Neck Strength



Gold Wire Segmentation by Properties



Heraeus Electronics

Heraeus Deutschland GmbH & Co. KG
Heraeusstraße 12-14
63450 Hanau, Germany
www.heraeus-electronics.com

Americas

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

Asia Pacific

Phone +65 6571 7677
electronics.apac@heraeus.com

China

Phone +86 21 3357 5457
electronics.china@heraeus.com

Europe, Middle East and Africa

Phone +49 6181 35 3069
+49 6181 35 3627
electronics.emea@heraeus.com