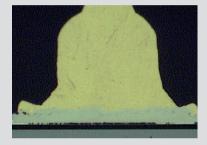
## Heraeus

### **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.

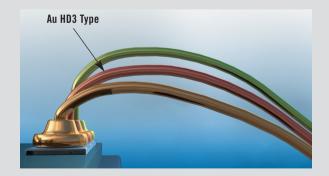


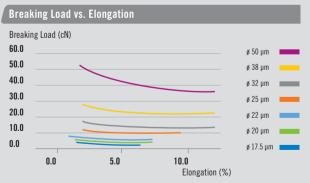
Areas of application

- 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





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	

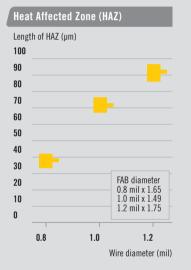
For other diameters, please contact Heraeus Bonding Wires sales representative.

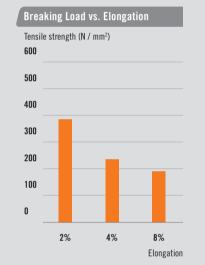
### Heraeus

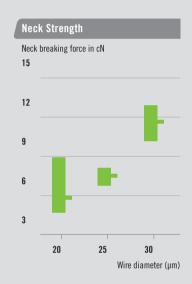
# HD3 Characteristics for 25 µm diameter Non-Gold Elements A control of the second se

Elastic Modulus	> 60 GPa			
Heat Affected Zone (HAZ)	190 – 230 µm			
Melting Point	1063 °C			
Density	19.32 g / cm <sup>3</sup>			

Heat Conductivity	3.12 W / cmK
Electrical Resistivity	2.3 μ <b>Ω</b> -cm
Coeff. of Linear Expansion (20 $-$ 100 $^{\circ}\text{C})$	14.2 ppm / K
Fusing Current for 25 µm, dia 10 mm length (in air)	0.369 A







#### Gold Wire Segmentation by Properties



Widest Bonding Window

### Highest Looping Performance Widest Bo Window





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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.