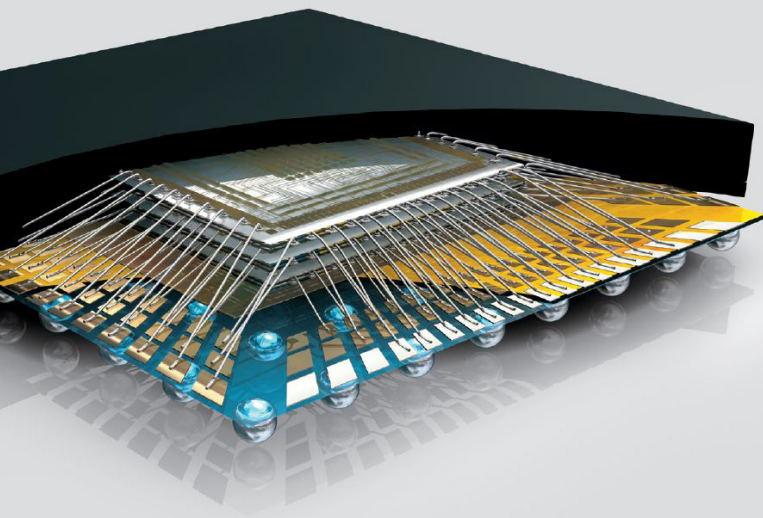


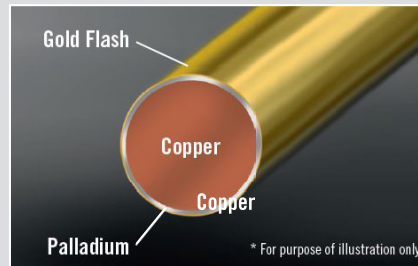
## PdFLASH

### Au Flash Pd Coated Copper Wire for IC Applications

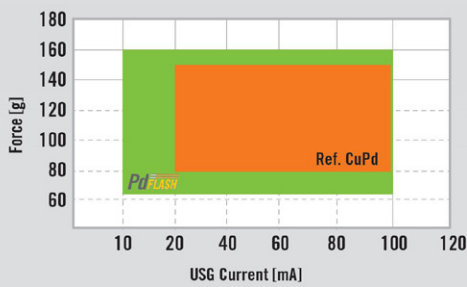


#### PdFlash Benefits & Features

- Robust 2nd bond performance
- Higher stitch pull
- Wider 2nd bond process window than CuPd
- Available in diameter ranging from 0.6 – 2.0 mil

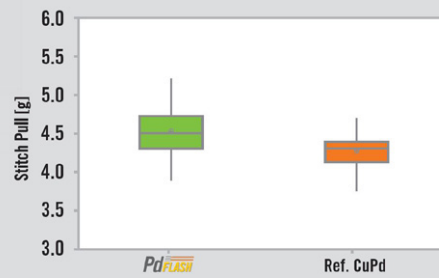


#### 2<sup>nd</sup> Bond Process Window



Wire Diameter: 0.7 mil, Device Type: PBGA, Capillary part #: K&S C8-FG-1034-P37  
(H:8.5, CD:10.5, T:23, OR:1, FA:11), Bonder Type: ProCu, Bonding Temperature: 160 °C

#### Stitch Pull



Wire Diameter: 0.7 mil, Device Type: PBGA, Capillary part #: K&S C8-FG-1034-P37  
(H:8.5, CD:10.5, T:23, OR:1, FA:11), Bonder Type: ProCu, Bonding Temperature: 160 °C

#### Recommended Technical Data of PdFlash

Diameter	Microns (µm)	15	18	20	23	25	28	30	33
	Mils	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3
Elongation	(%)	7 – 11	9 – 14	12 – 16	13 – 18	15 – 19	18 – 22	18 – 22	18 – 22
Breaking Load	(g)	2 – 6	4 – 8	7 – 11	9 – 13	12 – 16	15 – 19	17 – 22	20 – 25

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

# PdFLASH

## Characteristics for 0.7 mil diameter

### Physical Properties

Density*	9.03 g/cm <sup>3</sup>
Melting Point*	1081 °C
Thermal Conductivity*	401 W/m-K
Specific Heat Capacity @ 25 °C*	352 J/kg-K
Coeff. of Thermal Expansion*	16.6 (µm/m °C, 20 – 100 °C)
Electrical Resistivity	1.8 µΩ-cm
FAB Hardness	92 – 105 HV (0.01 N/5 s)
Wire Hardness	95 – 105 HV (0.01 N/5 s)
Elastic Modulus	90 – 100 GPa

### Chemical Composition

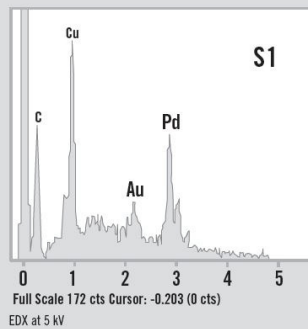
Pd + Au	1.5 % – 2.5 %
Cu Purity	99.98 % min

### Other Guidelines

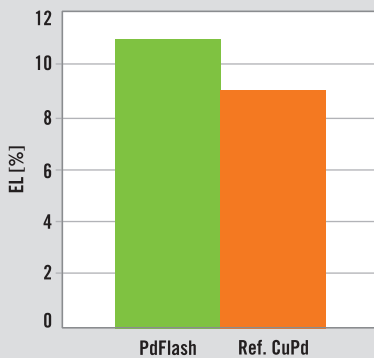
Floor Life	60 days
Shelf Life Time	6 months
Shielding Gas	N <sub>2</sub> / Forming Gas

\* Based on Core Material

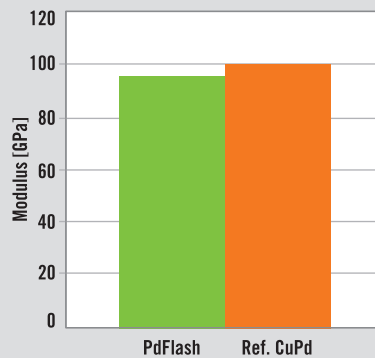
## SEM-EDX Analysis



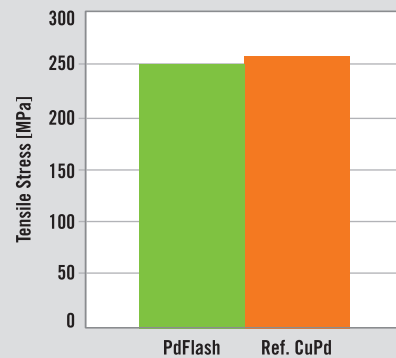
## EL [%]



## Modulus [GPa]



## Tensile Stress [MPa]



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