

# GPH

## High Reliability Au Alloy Bonding Wire

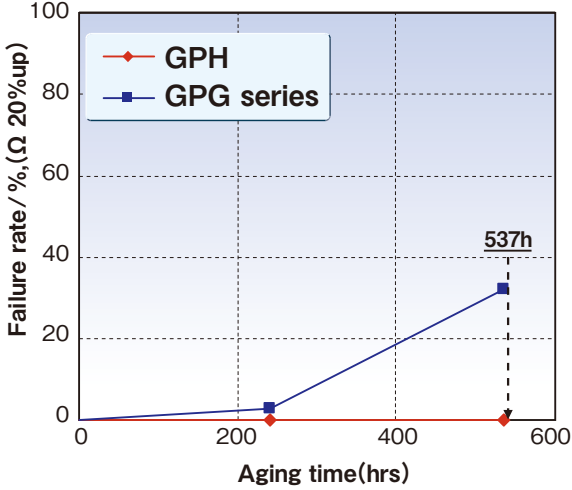
高信頼性対応Au合金ボンディングワイヤ



### Characteristics

- Higher bond reliability on halogen free compound

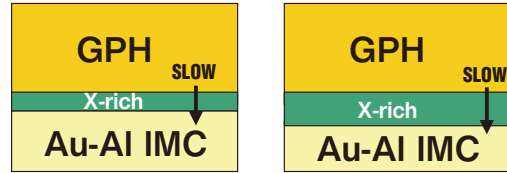
※ 220°C\*537hrs ≒ 175°C\*4000hrs  
WD: φ20μm



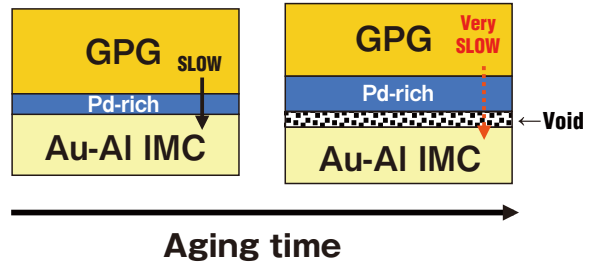
### 特徴

- ハロゲンフリー樹脂との組み合わせで高い高信頼性

#### GPH



#### GPG series



# GPG

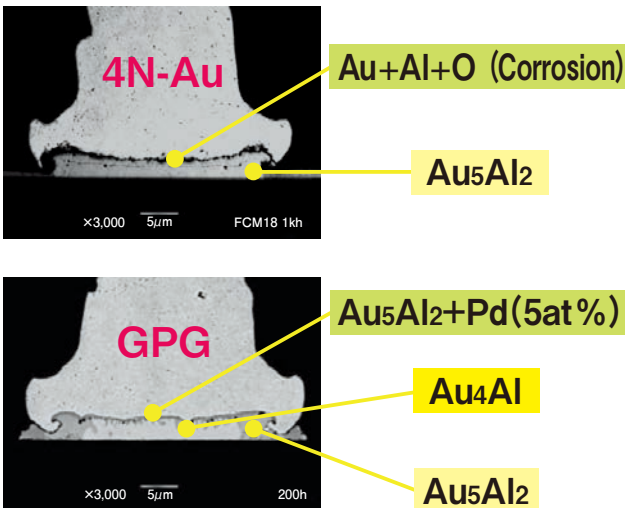
## High Reliability Au Alloy Bonding Wire

高信頼性対応Au合金ボンディングワイヤ



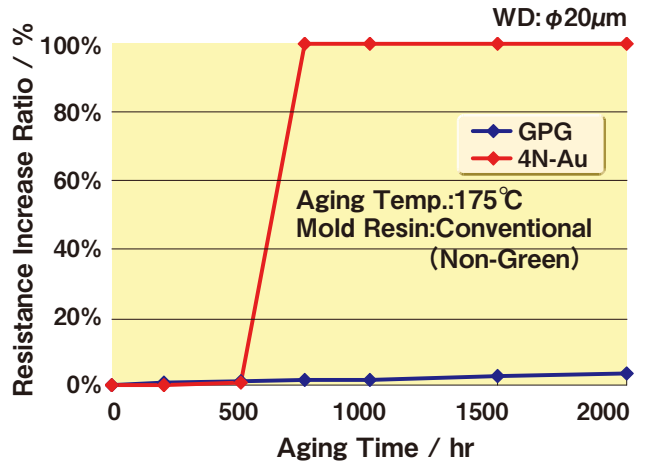
### Characteristics

- Higher bond reliability on halogen compound



### 特徴

- ハロゲン樹脂との組み合わせで高い接合信頼性。



**GPH Data Sheet**  
**General Properties**

Wire Diameter (um)	15	18	20	23	25	28	30	32	35	38
Tolerance (um)	+/- 1.0									
Weight (mg/200mm)	0.595-0.777	0.877-1.095	1.096-1.338	1.468-1.747	1.747-2.050	2.211-2.551	2.551-2.915	2.915-3.303	3.506-3.931	4.152-4.614
Breaking Load (gf)	3.3 - 6.1	4.8 - 8.8	5.9 - 10.8	7.8 - 14.3	9.2 - 16.9	11.5 - 21.2	13.2 - 24.4	15.1 - 27.7	18.0 - 33.2	21.2 - 39.1
Elongation (%)	Room Temp. 1.0 - 7.0					2.0 - 8.0				

**Physical Property**

Hardness (HV)	Free Air Ball	40 - 60									
	HAZ	50 - 85									
	Wire	75 - 95									
Density (g/cm <sup>3</sup> )	19.31										
Resistivity (u Ω cm) @ 20°C	3.1										
Fusing Current (A, Length=3mm,10sec)	0.2	0.3	0.4	0.5	0.7	0.8	1.0	1.1	1.3	1.6	
Electrical resistance (Ω, Length 10mm, Room Temp.)	1.54 - 2.01	1.09 - 1.37	0.90 - 1.09	0.69 - 0.82	0.58 - 0.69	0.47 - 0.54	0.41 - 0.47	0.36 - 0.41	0.30 - 0.34	0.26 - 0.29	
Thermal Conductivity @ 20°C (W/m/K)	240										
Linear Expansion Coefficient (0-100°C) (ppm/K)	14.4										
Elastic Modulus (GPa)	75 - 95										
Melting Point (°C)	1,065										

TDS GPH rev.2 20230524

**GPG Data Sheet**  
**General Properties**

Wire Diameter (um)	15	18	20	23	25	28	30	32	35	38
Tolerance (um)	+/- 1.0									
Weight (mg/200mm)	0.591-0.772	0.872-1.089	1.089-1.330	1.460-1.737	1.737-2.039	2.199-2.536	2.536-2.898	2.898-3.284	3.486-3.909	4.129-4.587
Breaking Load (gf)	3.7 - 5.7	5.4 - 8.1	6.7 - 10.1	8.8 - 13.3	10.4 - 15.7	13.0 - 19.7	15.0 - 22.6	17.0 - 25.7	20.4 - 30.8	24.0 - 36.3
Elongation (%)	Room Temp. 1.0 - 7.0					2.0 - 7.0			2.0 - 8.0	

**Physical Property**

Hardness (HV)	Free Air Ball	40 - 60									
	HAZ	50 - 85									
	Wire	75 - 95									
Density (g/cm <sup>3</sup> )	19.20										
Resistivity (u Ω cm) @ 20°C	3.0										
Fusing Current (A, Length=3mm,10sec)	0.2	0.3	0.4	0.6	0.7	0.8	1.0	1.1	1.3	1.6	
Electrical resistance (Ω, Length 10mm, Room Temp.)	1.49 - 1.95	1.06 - 1.32	0.87 - 1.06	0.66 - 0.79	0.57 - 0.66	0.45 - 0.52	0.40 - 0.45	0.35 - 0.40	0.29 - 0.33	0.25 - 0.28	
Thermal Conductivity @ 20°C (W/m/K)	240										
Linear Expansion Coefficient (0-100°C) (ppm/K)	14.4										
Elastic Modulus (GPa)	75 - 95										
Melting Point (°C)	1,070										

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