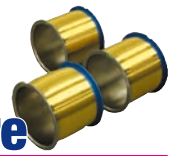


GPH

High Reliability Au Alloy Bonding Wire

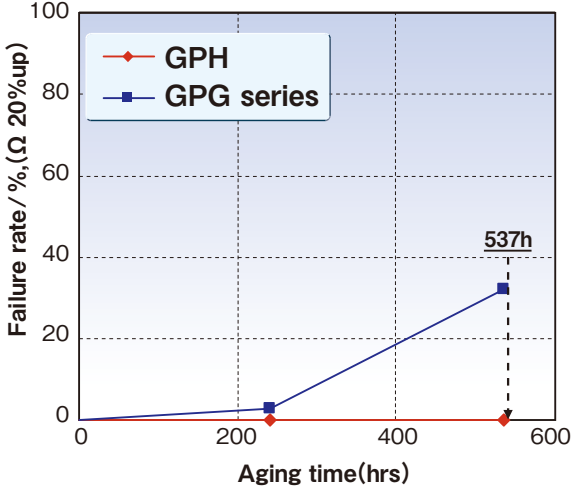
高信頼性対応Au合金ボンディングワイヤ



Characteristics

- Higher bond reliability on halogen free compound

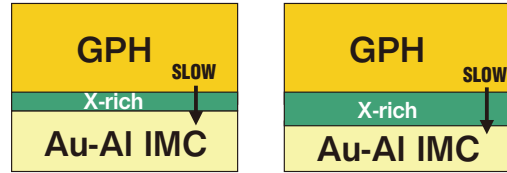
※ 220°C*537hrs ≒ 175°C*4000hrs
WD: φ20μm



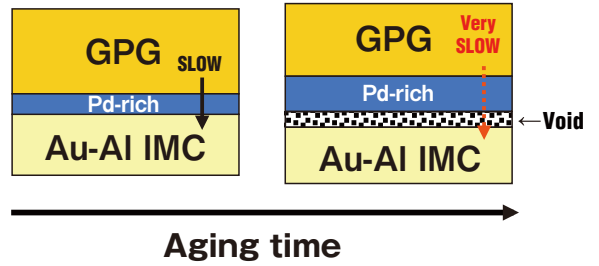
特徴

- 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

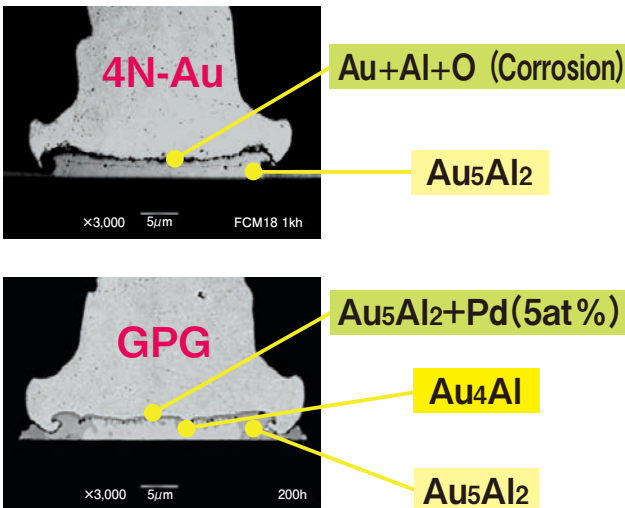
High Reliability Au Alloy Bonding Wire

高信頼性対応Au合金ボンディングワイヤ



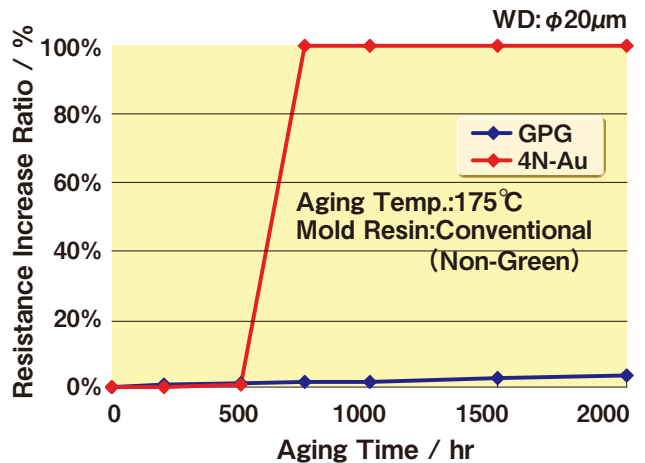
Characteristics

- 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	ASTM F205-94
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)	Tensile Tester Jaw Length = 100mm Production Guide 2012-3 10H										
Elongation (%)											

Physical Property

Hardness (HV)	Free Air Ball	35 - 55										Vickers tester
	HAZ	45 - 85										
	Wire	75 - 95										
Density (g/cm ³)	19.31										Calculated Value	
Resistivity (uΩcm) @ 20°C	3.1										4 terminal method	
Fusing Current (A, Length=3mm,10sec)	0.2*	0.4	0.4	0.6	0.7	0.9	1.0	1.2	1.4	1.7	Theoretical Value (※Out of applicable W.D.)	
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	0.31 - 0.34	0.26 - 0.29	Calculated Value	
Thermal Conductivity @ 20°C (W/m/K)	240										Theoretical Value	
Linear Expansion Coefficient (0-100°C) (ppm/K)	14.4										TMA	
Elastic Modulus (GPa)	75 - 95										Tensile Tester	
Melting Point (°C)	1,065										Phase Diagram	

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GPG Data Sheet
General Properties

Wire Diameter (um)	15	18	20	23	25	28	30	32	35	38	ASTM F205-94
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)	Tensile Tester Jaw Length = 100mm Production Guide 2012-3 10H										
Elongation (%)											

Physical Property

Hardness (HV)	Free Air Ball	35 - 55										Vickers tester
	HAZ	45 - 85										
	Wire	75 - 95										
Density (g/cm ³)	19.20										Calculated Value	
Resistivity (uΩcm) @ 20°C	3.0										4 terminal method	
Fusing Current (A, Length=3mm,10sec)	0.3*	0.4	0.5	0.6	0.7	0.9	1.1	1.2	1.5	1.8	Theoretical Value (※Out of applicable W.D.)	
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	0.30 - 0.33	0.25 - 0.28	Calculated Value	
Thermal Conductivity @ 20°C (W/m/K)	240										Theoretical Value	
Linear Expansion Coefficient (0-100°C) (ppm/K)	14.4										TMA	
Elastic Modulus (GPa)	75 - 95										Tensile Tester	
Melting Point (°C)	1,070										Phase Diagram	

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