

無鉛焊錫及產品序列 Typical Lead-Free Solders and Product Lineups

新原 NO.	千住 Item	Alloy compositions 合金組成	M.P.(°C) Solid /Liquid 固體/液體熔點		Bar 棒狀	Wire 線狀	Flux Cored 松脂心錫絲	Ball 球狀	Paste 焊錫膏	Tensile Strength (Mpa) 張力	Elongation 延伸率 (%)	Young's 模氏率 (Gpa)	Sp.Gr. 比重	Remarks 註解
201	M10	Sn/5.0Sb	240	243	○	○				41.2	43	44.5	7.3	Lustrous surface after solidification/ 固化具金屬光澤
202	M12	Sn/0.7Cu/0.3Sb	227	229	○	○				31.4	55	30.7	7.3	
203	M20	Sn/0.75Cu	227		○	○	○	○		30.9	45	32.8	7.3	
210	M30	Sn/3.5Ag	221		○	○	○	○		41.0	58	43.2	7.4	
221	M31	Sn/3.35Ag/0.65Cu	217	219	○	○	○	○		53.0	57	45.1	7.4	
224	M34	Sn/1.0Ag/0.5Cu	217	217	○	○				45.2	46	36.3	7.3	Prevent tombstoning/墓碑防止
225	M35	Sn/0.7Cu/0.3Ag	217	227	○	○	○			37.1	50	37.5	7.3	Recommended for wave soldering/適波焊
246	SA2515	Sn/2.5Ag/0.5Cu /1.0Bi	214	221	○					58.3	47	41.8	7.4	Recommended Sn/Ag/Bi/Cu system/ 建議Sn/Ag/Bi/Cu系統
247	M41	Sn/2.0Ag/0.5Cu/2.0Bi	212	221	○					80.4	27	44.1	7.4	2% Bismuth Contained/含2%Bi
248	M42	Sn/2.0Ag/0.75Cu/3.0Bi	207	218	○					84.3	25	44.2	7.5	3% Bismuth contained/含3%Bi
251	M51	Sn/3.0Ag/0.7Cu/1.0In	214	217	○	○		○		51.6	48	41.1	7.4	Indium contained/含In
	M706	Sn/3.0Ag/0.7Cu/1Bi/2.5In	204	215										Lower Melting tempature by Bi and In in addition/低溫含Bi、In
230	M702	Sn/3.0Ag/0.7Cu	217	219	○	○	○	○		57.3	48	41.0	7.4	
	#7100(NEMI)	Sn/3.9Ag/0.6Cu	217	219	○	○	○	○						High resistant the meal fatigue solder/ 耐熱疲勞
	#7097	Sn/4.0Ag/0.5Cu	217	222	○	○	○	○						
231	M704	Sn/3.35Ag/0.7Cu/0.3Sb	218	220	○	○		○		57.1	45	44.6	7.4	Castin-solder /Castin 焊錫
232	M705	Sn/3.0Ag/0.5Cu	217	219	○	○	○	○		53.3	46	41.6	7.4	Recommended Sn/Ag/Cu system/ 建議Sn/Ag/Cu系統
	M707	Sn/2.0Ag/0.5Cu	217	223	○			○						
	M708	Sn/3.0Ag	220	221	○	○		○						For filling of solder bath with M705
	DY Alloy	Sn/1.0Ag/4.0Cu	217	359	○									Prevent Cu dissolution/避免銅擴散
	FBT Alloy	Sn/2.0Ag/6.0Cu	217	380	○									Prevent Cu dissolution/避免銅擴散
301	L11	Sn/6.0Zn/3.0Bi	189	199	○				○	51.9	25	51.9	7.4	
302	L20	Sn/58Bi		139	○				○	76.5	27	32.4	8.7	Eutectic/共晶
303	L21	Sn/2.0Ag/0.5Cu/7.5Bi	190	213					○	56.0	20	41.6	7.5	Alloy H/ H合金
	L23	Sn/57Bi/1.0Ag	138	204					○					Improved mechanical strength of L20/ L20 機械強度加強
	Reference	Sn63/Pb37		183						56.0	56	25.8	8.4	

Sn/Ag3.9/Cu0.6&Sn/Ag3.5/Cu0.7 are recommend by NEMI & 日本熔接協會

NEMI & 日本熔接協會推薦Sn/Ag3.9/Cu0.6 & Sn/Ag3.5/Cu0.7