


SELECTION GUIDE FOR SOLDER WIRE

	SOLDER WIRE																	
	Parameters	Solidus (°C)	Liquidus (°C)	Density (g/cm ³)	Thermal Conductivity Wm-K	Electrical resistivity µΩ-m	Tensile strength Kg/cm ²	Elongation %	Hardness (HB)	Flux by weight	Flux Types	(Solder Iron Temperature)	Manual Soldering	Auto Soldering	APPLICATION			
	Alloys	Alloy Properties							Flux %	Soldering parameters			Recommendation					
LEADED	Sa20Pb80	183	280	10.21	37	0.198	340	20	11	1.5/2.2/3.3/4.5/ Customisation Based On Application	ROLO,ROL1,ROM1, ORH0, ORH1, NO CLEAN, WATER SOLUBLE / HALOGEN / HALIDE FREE / Zero HALOGEN & HALIDE	±300 °C	✓	✓	Auto radiators			
	Sa30Pb70	183	257	9.72	41	0.185	350	18	12			±300 °C	✓	✓	Industrial soldering			
	Sa50Pb50	183	212	8.87	48	0.158	420	35	14			±300 °C	✓	✓	Electrical/Industrial soldering			
	Sa60Pb40	183	191	8.50	49	0.153	535	40	16			±300 °C	✓	✓	Electronic soldering			
	Sa63Pb37	183	183	8.40	50	0.145	525	37	17			±300 °C	✓	✓	Electronic soldering			
	Sa62Pb36Ag2	179	179	8.41	50	0.145	490	-	16			±300 °C	✓	✓	High Conductive & reliability			
	Sa70Pb30	183	257	9.72	41	0.185	350	18	12			±300 °C	✓	✓	Repair work			
	Sa80Pb20	183	280	10.21	37	0.198	340	20	11			±280	✓	✓	Electrical & Industrial Soldering			
	Sa80Pb10	275	302	10.75	25	0.194	310	30	10			±400	✓	✓	Ship Building & marine			
	Sa80Pb0	183	238	9.28	44	0.171	380	25	12			±205	✓	✓	Radiator Soldering			
	Sa7Pb95	308	312	11.06	23	0.196	280	45	8			±400	✓	✓	High temperature soldering & profiling			
	Pb88Sn10Ag2	267	290	10.75	27	0.203	230	42	-			±400	✓	✓	Semi conductors ,diodes ,etc.			
	LEAD FREE	95A	221	240	7.40	-	0.137	365	30			14	1.5/2.2/3.3/4.5/ Customisation Based On Application	ROLO,ROL1,ROM1, ORH0, ORH1, NO CLEAN, WATER SOLUBLE / HALOGEN / HALIDE FREE / Zero HALOGEN & HALIDE	±350 °C	✓	✓	Automotive ignition,magnet, motors
		SAC 0107	217	228	7.32	-	-	-	-			-			±350 °C	✓	✓	Low cost option
SAC0307		217	228	7.33	-	-	300	22	14	±350 °C	✓	✓			Consumer electronics			
SAC305		217	220	7.38	58	0.132	500	19	15	±350 °C	✓	✓			Automotive electronics			
Sn95.5Ag3.5		221	221	7.37	55	0.123	380	35	15	±350 °C	✓	✓			High temp applications			
SAC 387		217	220	7.44	66	0.132	600	16	15	±350 °C	✓	✓			High temp applications			
SAC 405		217	220	7.44	62	0.132	530	17	15	±350 °C	✓	✓			Automotive electronics			
Sn97Cu3		227	300	7.32	-	0.118	-	-	-	±400 °C	✓	✓			High temp applications			
Sn99.3Cu0.7		227	227	7.31	66	0.126	300	21	9	±350 °C	✓	✓			Common LF option			
SN100C		232	232	7.29	73	0.124	135	-	4	±350 °C	✓	✓			Disimilar metals			
EXCELLENT RELIABILITY (TIP BOOSTER, GLO FLO)	Sa60Pb40	183	191	8.50	49	0.153	535	40	16	1.5/2.2/3.3/4.5/ Customisation Based On Application	NO CLEAN / HALOGEN FREE / ROLO	±300 °C	✓	✓	Electronic soldering			
	Sa63Pb37	183	183	8.40	50	0.145	525	37	17			±300 °C	✓	✓	Electronic soldering			
	Sn99.3Cu0.7	227	227	7.31	66	0.126	300	21	9			±350 °C	✓	✓	Common LF option			
	SN100C	232	232	7.29	73	0.124	135	-	4			±350 °C	✓	✓	Disimilar metals			
	SAC0307	217	228	7.33	-	-	300	22	14			±350 °C	✓	✓	Consumer electronics			
	SAC305	217	220	7.38	58	0.132	500	19	15			±350 °C	✓	✓	Automotive electronics			