

Datasheet revision 1.1

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## Sn42/Bi57/Ag1 2.2% Flux Core Solder Wire 1.0mm 10g

Product Highlights LOW TEMPERATURE WITH FLUX CORE Melts at 138°C (281°F) No-Clean Rosin-Activated 2.2% flux core Lead-Free RoHS 3 and REACH compliant

Specifications	
Alloy:	Sn42/Bi57/Ag1
Wire diameter:	0.040" (1.0mm)
Flux Core:	2.2% No-Clean Rosin-Activated
Flux Classification:	ROM0
Melting Point:	138°C (281°F)
Packaging:	10g (0.35oz) Spool
Shelf Life:	>60 months

Storage and Handling Store in a non-corrosive, dry environment.

**Please Note:** Although Sn42/Bi57/Ag1 forms strong joints and is more ductile due to the added 1% Silver, in wire form it is brittle and needs to be handled gently when unspooling. It is normal for spooled Sn42/Bi57/Ag1 wire to have some breaks in it.

<b>Test Re</b>	esults
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Test Requirement	Result	
IPC-TM-650: 2.3.32	L: No breakthrough	
IPC-TM-650: 2.6.15	M: Slight corrosion	
IPC-TM-650: 2.3.28.1	L: <0.05%	
IPC-TM-650: 2.6.14.1	L: <1 decade drop (No-clean)	
IPC-TM-650: 2.6.3.7	L: ≥100MΩ (No-clean)	
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IPC-TM-650: 3.4.2.5	Clear and free from precipitation	
Electronic Industry Citizenship	Compliant	
Coalition (EICC)		
Articles 33 and 67 of Regulation (EC)	Contains no substance >0.1% w/w that	
No 1907/2006	is listed as a SVHC or restricted for	
	use in solder materials	
J-STD-004B, Amendment 1 (Solder Fluxes):		
J-STD-006C, Amendments 1 & 2 (Solder Alloys and Fluxed/Non-Fluxed Solders):		
RoHS 3 Directive (EU) 2015/863:		
	IPC-TM-650: 2.3.32 IPC-TM-650: 2.6.15 IPC-TM-650: 2.3.28.1 IPC-TM-650: 2.6.14.1 IPC-TM-650: 2.6.3.7 IPC-TM-650: 3.4.2.5 Electronic Industry Citizenship Coalition (EICC) Articles 33 and 67 of Regulation (EC) No 1907/2006	

Flux Core	Alloy	Melting Point	Diameter	Size	Orderable Part Number
Sn63/Pb37		183°C (361°F)	.015" (0.38mm)	100g (3.5oz)	SMDSW.015 100g
				0.4 oz	SMDSW.020 .4OZ
				1 oz	SMDSW.020 1OZ
			.020" (0.5mm)	2 oz	SMDSW.020 2OZ
				4 oz	SMDSW.020 4OZ
				1/2 lb	SMDSW.020 8OZ
	Sn63/Pb37			1 lb	SMDSW.020 1LB
			.031" (0.8mm)	0.7 oz	SMDSW.031.70Z
				1 oz	SMDSW.031 10Z
				2 oz	SMDSW.031 2OZ
			.031 (0.01111)	4 oz	SMDSW.031 4OZ
				1/2 lb	SMDSW.031 8OZ
				1 lb	SMDSW.031 1LB
			.015" (0.38mm)	100g (3.5oz)	SMD2SW.015 100g
				0.4 oz	SMD2SW.020 .40Z
No-Clean Water-				1 oz	SMD2SW.020 10Z
			.020" (0.5mm)	2 oz	SMD2SW.020 2OZ
Washable Synthetic			.020 (0.01111)	4 oz	SMD2SW.020 4OZ
Flux Core 2.2% Sn60/Pb40				1/2 lb	SMD2SW.020 8OZ
	183-188°C (361-370°F)		1 lb	SMD2SW.020 1LB	
(Except .006" and				0.7 oz	SMD2SW.031 .70Z
.008" diameter wire			.031" (0.8mm)	1 oz	SMD2SW.031 10Z
which are 1.2%)				2 oz	SMD2SW.031 2OZ
			.031 (0.01111)	4 oz	SMD2SW.031 4OZ
				1/2 lb	SMD2SW.031 8OZ
				1 lb	SMD2SW.031 1LB
			.015" (0.38mm)	100g (3.5oz)	SMD3SW.015 100g
			.020" (0.5mm)	0.4 oz	SMD3SW.020 .40Z
				1 oz	SMD3SW.020 10Z
				2 oz	SMD3SW.020 2OZ
				4 oz	SMD3SW.020 4OZ
		3/Ag2 179°C (354°F)		1/2 lb	SMD3SW.020 8OZ
Sn62/Pb36/Ag2	Sn62/Pb36/Ag2			1 lb	SMD3SW.020 1LB
			.031" (0.8mm)	0.7 oz	SMD3SW.031 .7OZ
				1 oz	SMD3SW.031 10Z
				2 oz	SMD3SW.031 2OZ
				4 oz	SMD3SW.031 4OZ
				1/2 lb	SMD3SW.031 8OZ
				1 lb	SMD3SW.031 1LB

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Flux Core	Alloy	Melting Point	Diameter	Size	Orderable Part Number
			.006" (0.15mm)	50g (1.8oz)	SMDSWLF.006 50g
			.008" (0.20mm)	50g (1.8oz)	SMDSWLF.008 50g
				0.3 oz	SMDSWLF.015 .30Z
			.015" (0.38mm)	1 oz	SMDSWLF.015 1OZ
				2 oz	SMDSWLF.015 2OZ
				4 oz	SMDSWLF.015 4OZ
				1/2 lb	SMDSWLF.015 8OZ
			1 lb	SMDSWLF.015 1LB	
		217-220°C (423-428°F)	.020" (0.5mm)	0.4 oz	SMDSWLF.020 .4OZ
	Sn96.5/Ag3.0/Cu0.5			1 oz	SMDSWLF.020 1OZ
	SH90.5/Ag5.0/Cu0.5			2 oz	SMDSWLF.020 2OZ
				4 oz	SMDSWLF.020 4OZ
				1/2 lb	SMDSWLF.020 8OZ
				1 lb	SMDSWLF.020 1LB
				0.7 oz	SMDSWLF.031.70Z
				1 oz	SMDSWLF.031 1OZ
			.031" (0.8mm)	2 oz	SMDSWLF.031 2OZ
No-Clean Water-				4 oz	SMDSWLF.031 4OZ
Washable Synthetic Flux Core 2.2%				1/2 lb	SMDSWLF.031 8OZ
(Except .006" and				1 lb	SMDSWLF.031 1LB
.008" diameter wire			.012" (0.3mm)	100g (3.5oz)	SMD2SWLF.012 100g
which are 1.2%)				0.3 oz	SMD2SWLF.015 .3OZ
			.015" (0.38mm)	1 oz	SMD2SWLF.015 1OZ
				2 oz	SMD2SWLF.015 2OZ
				4 oz	SMD2SWLF.015 4OZ
				1/2 lb	SMD2SWLF.015 8OZ
				1 lb	SMD2SWLF.015 1LB
				0.4 oz	SMD2SWLF.020 .4OZ
		227°C (441°F)	.020" (0.5mm)	1 oz	SMD2SWLF.020 1OZ
	Sn99.3/Cu0.7			2 oz	SMD2SWLF.020 2OZ
				4 oz	SMD2SWLF.020 4OZ
				1/2 lb	SMD2SWLF.020 8OZ
				1 lb	SMD2SWLF.020 1LB
			.031" (0.8mm)	0.7 oz	SMD2SWLF.031.70Z
				1 oz	SMD2SWLF.031 10Z
				2 oz	SMD2SWLF.031 2OZ
				4 oz	SMD2SWLF.031 4OZ
				1/2 lb	SMD2SWLF.031 8OZ
	1 50/0 40		00.411 (0.0	1 lb	SMD2SWLF.031 1LB
0	In52/Sn48	118°C (244°F)	.031" (0.8mm)	10 feet	SMDIN52SN48
Solid Wire (No Flux)	In97/Ag3	143°C (289°F)	.031" (0.8mm)	10 feet	SMDIN97AG3
	In100	157°C (315°F)	.031" (0.8mm)	10 feet	SMDIN100
	Sn42/Bi57/Ag1 Sn42/Bi57/Ag1	138°C (281°F)	.030" (0.762mm)	32 feet	SMDSWLTLFP32
		138°C (281°F)	.040" (1.0mm)	10g (0.35oz)	SMDSWLT.040 10g
No-Clean Rosin-Activated Flux Core 2.2%				20g (0.7oz)	SMDSWLT.040 20g
				50g (1.8oz)	SMDSWLT.040 50g
				100g (3.5oz)	SMDSWLT.040 100g
				200g (7.0oz)	SMDSWLT.040 200g