CHIPQUIK® SMD3SWLT.040 20g

Datasheet revision 1.1 www.chipquik.com

Sn42/Bi58 2.2% Flux Core Solder Wire 1.0mm 20g

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/Bi58
Wire diameter:	0.040” (1.0mm)
Flux Core:	2.2% No-Clean Rosin-Activated
Flux Classification:	ROM0
Melting Point:	138°C (281°F)
Packaging:	20g (0.7oz) Spool
Shelf Life:	>60 months

Storage and Handling

Store in a non-corrosive, dry environment.

Please Note: Although Sn42/Bi58 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/Bi58 wire to have some breaks in it.

Test Results

Test J-STD-004 or other requirements as stated	Test Requirement	Result
Copper Mirror	IPC-TM-650: 2.3.32	L: No breakthrough
Corrosion	IPC-TM-650: 2.6.15	M: Slight corrosion
Quantitative Halides	IPC-TM-650: 2.3.28.1	L: <0.05%
Electrochemical Migration	IPC-TM-650: 2.6.14.1	L: <1 decade drop (No-clean)
Surface Insulation Resistance 85°C, 85% RH @ 168 Hours	IPC-TM-650: 2.6.3.7	L: ≥100MΩ (No-clean)
Visual	IPC-TM-650: 3.4.2.5	Clear and free from precipitation
Conflict Minerals Compliance	Electronic Industry Citizenship Coalition (EICC)	Compliant
REACH Compliance	Articles 33 and 67 of Regulation (EC) No 1907/2006	Contains no substance >0.1% w/w that is listed as a SVHC or restricted for use in solder materials

Conforms to the following Industry Standards:

J-STD-004B, Amendment 1 (Solder Fluxes):	Yes
J-STD-006C, Amendments 1 & 2 (Solder Alloys and Fluxed/Non-Fluxed Solders):	Yes
RoHS 3 Directive (EU) 2015/863:	Yes

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ChipQuik® Solder Wire Orderable Part Numbers:

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

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Flux Core	Alloy	Melting Point	Diameter	Size	Orderable Part Number
No-Clean Water-Washable Synthetic Flux Core 2.2% (Except .006" and .008" diameter wire which are 1.2%)	Sn96.5/Ag3.0/Cu0.5	217-220°C (423-428°F)	.006" (0.15mm)	50g (1.8oz)	SMDSWLF.006 50g
			.008" (0.20mm)	50g (1.8oz)	SMDSWLF.008 50g
			.015" (0.38mm)	0.3 oz	SMDSWLF.015 .3OZ
				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
			.020" (0.5mm)	0.4 oz	SMDSWLF.020 .4OZ
				1 oz	SMDSWLF.020 1OZ
				2 oz	SMDSWLF.020 2OZ
				4 oz	SMDSWLF.020 4OZ
				1/2 lb	SMDSWLF.020 8OZ
				1 lb	SMDSWLF.020 1LB
			.031" (0.8mm)	0.7 oz	SMDSWLF.031 .7OZ
				1 oz	SMDSWLF.031 1OZ
				2 oz	SMDSWLF.031 2OZ
				4 oz	SMDSWLF.031 4OZ
				1/2 lb	SMDSWLF.031 8OZ
				1 lb	SMDSWLF.031 1LB
	Sn99.3/Cu0.7	227°C (441°F)	.012" (0.3mm)	100g (3.5oz)	SMD2SWLF.012 100g
			.015" (0.38mm)	0.3 oz	SMD2SWLF.015 .3OZ
				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
			.020" (0.5mm)	0.4 oz	SMD2SWLF.020 .4OZ
				1 oz	SMD2SWLF.020 1OZ
				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 .7OZ
				1 oz	SMD2SWLF.031 1OZ
				2 oz	SMD2SWLF.031 2OZ
				4 oz	SMD2SWLF.031 4OZ
				1/2 lb	SMD2SWLF.031 8OZ
				1 lb	SMD2SWLF.031 1LB
Solid Wire (No Flux)	In52/Sn48	118°C (244°F)	.031" (0.8mm)	10 feet	SMDIN52SN48
	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	138°C (281°F)	.030" (0.762mm)	32 feet	SMDSWLTLFP32
No-Clean Rosin-Activated Flux Core 2.2%	Sn42/Bi57/Ag1	138°C (281°F)	.040" (1.0mm)	10g (0.35oz)	SMDSWLT.040 10g
				20g (0.7oz)	SMDSWLT.040 20g
				50g (1.8oz)	SMDSWLT.040 50g
				100g (3.5oz)	SMDSWLT.040 100g
				200g (7.0oz)	SMDSWLT.040 200g
No-Clean Rosin-Activated Flux Core 2.2%	Sn42/Bi57.6/Ag0.4	138°C (281°F)	.040" (1.0mm)	10g (0.35oz)	SMD2SWLT.040 10g
				20g (0.7oz)	SMD2SWLT.040 20g
				50g (1.8oz)	SMD2SWLT.040 50g
				100g (3.5oz)	SMD2SWLT.040 100g
				200g (7.0oz)	SMD2SWLT.040 200g
No-Clean Rosin-Activated Flux Core 2.2%	Sn42/Bi58	138°C (281°F)	.040" (1.0mm)	10g (0.35oz)	SMD3SWLT.040 10g
				20g (0.7oz)	SMD3SWLT.040 20g
				50g (1.8oz)	SMD3SWLT.040 50g
				100g (3.5oz)	SMD3SWLT.040 100g
				200g (7.0oz)	SMD3SWLT.040 200g

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