

SOLDER CONNECTION

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Technical Bulletin

SC4100 Flux Cored Solder Wire

DESCRIPTION

SC4100 flux cored solder wire utilizes the latest in no clean flux technology and offers excellent soldering performance across a wide range of lead free and leaded solder alloys. SC4100 provides excellent hole fill and pad coverage across HASL finishes and OSP protective coatings.

Designed primarily for robotic soldering, where fast wetting and thermal transfer properties are key, SC4100 also benefits from an evenly distributed flux medium throughout its entire length. This ensures consistent and repeatable solder joints with low spatter during production. The packaging and the quality of the winding will minimise the potential for jams during the feed process. Fume and odour is minimal but LEV extraction may be required. Residues are cosmetically pleasing and, in most applications, do not need to be removed. SC4100 is classified as ROL0 per J-STD-004.

FEATURES AND BENEFITS

- Low Voids/Skips
- Low Spatter
- Extends Solder Tip Life
- ROL0 per IPC J-STD-004
- REACH and RoHS Compliant*
- Fast Wetting/Feed Rates
- Halogen Free per EN14582
- Ideal for Robotic Soldering

*Lead-Free Alloys

APPLICATION

It is important to match the geometry of the solder tip to the size of lead or component pad you are working on. As a guide line for lead free solders a tip temperature of between 370° - 425°C is ideally suited. For leaded alloys a temperature of 300° - 400°C is recommended.

HANDLING & STORAGE

All cored solder wires should be stored in clean dry areas away from moisture and direct sunlight. Do not freeze.

Shelf life:	7 years	< 85°F (< 29°C)

CLEANING

SC4100 is a no clean solder wire and therefore residues do not need to be removed. If cleaning is required, SC4100 can be cleaned with commercially available flux removers. IPA is not recommended. For further advice on your application contact one of our Sales Offices



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TEST DATA

	Specifications	Test Method
Flux Classification	ROLO	JSTD-004
	ROL1	JSTD-004B 3.3.1
Copper Mirror	Low	J-STD-004B 3.4.1.1
		IPC-TM-650 2.3.32
Corrosion	Pass	J-STD-004B 3.4.1.2
		IPC-TM-650 2.6.15
Quantitative Halides	0.09% (Typical)	J-STD-004B 3.4.1.3
		IPC-TM-650 2.3.28.1
Qualitative Halides:		
Silver Chromate:	Pass	J-STD-004B 3.5.1.1
		IPC-TM-650 2.3.33
Fluoride Spot:	No Fluoride	J-STD-004B 3.5.1.2
		IPC-TM-650 2.3.35.1
SIR	Pass	J-STD-004B 3.4.1.4
		IPC-TM-650 2.6.3.7

SAFETY

Use with adequate ventilation and proper personal protective equipment. Refer to the accompanying Safety Data Sheet for any specific emergency information. Do not dispose of any hazardous materials in non-approved containers.

AVAILABILITY

Alloy Designation	Melting or Solidus / Liquidus Temp °C	Flux Amount
SAC305	217 / 221	P3
SAC 0307	217 / 228	P3
SN100C	227	P3

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