



No-Clean Cored Wire Solder

Features:

- Excellent Wetting
- Wide Process Window
- Cleanable with Saponifier
- Lead-Free Compatible

Description:

Glow Core is a no-clean, resin-based flux cored wire solder designed to offer excellent wetting characteristics and lead-free compatibility. This product is very active and is recommended for fast cycle time soldering. Glow Core flux promotes good thermal transfer, offering better solder penetration into plated through holes or surface mount interconnections. Glow Core cored wire produces low-to-medium post-process residues that are electrically safe and do not require cleaning for most applications.

Availability:

- Glow Core is standard with a 2.0% flux core for tin-lead (2.5% flux core for lead-free) alloys.
- Glow Core is available in Sn/Pb, Sn/Ag/Cu, SN100C[®] alloys.
- Standard spool sizes: ½ lb. for .010 and .015 diameters, and 1lb. for .020, .032, .040, .050 and .062 diameters.
- Packaging of ½ lb. and 1 lb. spools is available in 12 lb. and 24 lb. cases.
- Other flux percentages, alloys, diameters and spool sizes may be available upon special request.

Application:

- Solder iron tip temperature should be between 350° - 400°C (650° - 750°F) for Sn63, Sn62 and Sn60 alloys, 370° - 425°C (700° - 800°F) for SN100C[®], Sn/Ag and Sn/Ag/Cu (SAC305, SAC405, CASTIN, etc.) alloys.
- Hold the solder iron tip at a 45° to 60° angle to the work surface.
- The solder iron should contact both the component lead and PCB pad surface.
- Solder and flux should flow onto the lead and pad or lead and barrel to promote optimum flux activity for the joint being worked.
- If additional flux is needed, the use of AIM's NC266-3 flux is recommended. Operators should use an applicator capable of dispensing precise amounts of flux to eliminate over-saturation and excessive spread.

Cleaning:

Glow Core can be cleaned with saponified tap water or an alcohol and water blend. AIMTERGE 520 is recommended. A water temperature of 60°C (140°F) is recommended, and should be adequate for removing any post process residues.

Handling and Storage:

- Glow Core cored wire has an indefinite shelf life when proper storage conditions are observed.
- Store Glow Core in a clean, dry area away from moisture and sunlight.
- Do not freeze this product.

Safety:

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

Classification:

Parameter	Value
J-STD-004	RELO

Surface Insulation Resistance:

General References

AIM Glowcore S Series cored wire solder was tested to J-STD-004 and IPC-TM-650 method 2.6.3.7, Surface Insulation Resistance.

Sample and Instrumentation

Cored Wire Solder: Glowcore S Series
Test Board: IPC-B-24, bare copper
Environmental Chamber: Thermotron SE-300
Electrical Testing Equipment: AUTO SIR Test System

Test Condition

Temperature/Humidity: 40°C/ 90%RH
Test/Bias Voltage: 10V
Test Duration: 7 days, 10080 minutes in total, tested every 20 minutes

Pass-Fail Criteria

IPC J-STD-004B §3.4.1.4.1
All measurements on all test patterns shall be exceed the 100 MΩ
No evidence of electrochemical migration that reduces conductor spacing by more than 20%
No corrosion of the conductors

Test Results

Test Data (see chart)	PASS
Presence of Dendrites	NO
Maximum Percent Reduction of Spacing	0%
Presence of Discoloration Between Conductors	NO
Presence of Water Spots	NO
Presence of Subsurface Metal Migration	NO

Result Chart:

