



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. IPC flux classification for this material is REL0.

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 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.

Surface Insulation Resistance:

Surface Insulation Resistance (SIR) test for cored wire flux was carried out according to J-STD-004 and IPC-TM-650 method 2.6.3.3.

Reference	Property	Pass-Fail Criteria	Result
IPC-TM-650 method 2.6.3.3. §5.5.1	Control coupons	>1E9 Ω at 96 and 168 h	PASS
J-STD-004 §3.2.4.5.1	Sample coupons	>1E8 Ω at 96 and 168 h	PASS
IPC-TM-650 method 2.6.3.3. §5.5.2	Post-test visual inspection	No dendrite growth or corrosion	PASS

Conclusions

The result of the qualification test indicates that Glow Core wire solder complies with the requirements of IPC TM-650, Method 2.6.3.3 for Surface Insulation Resistance.

Test Data Summary:

Control		Initial	24 Hours	96 Hours	168 Hours
#1	A	5.03E+13	8.03E+09	9.73E+09	8.78E+09
	B	5.03E+13	8.32E+09	9.92E+09	9.72E+09
	C	3.35E+13	9.21E+09	1.03E+10	1.02E+10
	D	3.35E+13	8.67E+09	1.13E+10	9.72E+09
#2	A	2.01E+13	8.23E+09	9.73E+09	9.06E+09
	B	2.51E+13	7.76E+09	9.51E+09	9.36E+09
	C	2.01E+13	8.87E+09	1.01E+10	9.67E+09
	D	2.51E+13	7.98E+09	1.05E+10	9.04E+09
#3	A	1.00E+14	1.48E+10	1.65E+10	1.62E+10
	B	3.35E+13	1.46E+10	1.71E+10	1.70E+10
	C	1.00E+14	1.45E+10	1.64E+10	1.62E+10
	D	5.03E+13	1.36E+10	1.70E+10	1.58E+10
Glow Core Wire					
#1	A	1.00E+14	9.99E+08	1.47E+09	1.28E+09
	B	1.10E+14	1.09E+09	6.17E+08	5.19E+08
	C	1.00E+14	1.77E+09	2.17E+09	1.68E+09
	D	1.00E+14	1.09E+09	1.65E+09	1.31E+09
#2	A	1.10E+14	5.87E+08	2.90E+08	1.84E+08
	B	1.10E+14	1.53E+09	1.14E+09	1.01E+09
	C	1.00E+14	7.08E+08	8.46E+08	7.43E+08
	D	1.10E+14	4.55E+08	5.74E+08	5.88E+08
#3	A	1.00E+14	7.49E+08	3.46E+08	2.46E+08
	B	8.01E+13	9.03E+08	1.08E+09	9.24E+08
	C	1.10E+14	6.95E+08	6.42E+08	4.96E+08
	D	1.67E+13	7.72E+08	8.93E+08	7.36E+08

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