



TECHNICAL DATA SHEET

CATEGORY:

NO-CLEAN CORED WIRE SOLDER

NAME:

GLOW CORE

FEATURES

- EXCELLENT WETTING
- LEAD-FREE COMPATIBLE
- WIDE PROCESS WINDOW
- CLEANABLE WITH SAPONIFIER

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.

HANDLING

- 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

APPLICATION

- Solder iron tip temperature should be between 650° - 750°F (350° - 400°C) for Sn63, Sn62 and Sn60 alloys, 700° - 800°F (370° - 425°C) for Sn/Ag and Sn/Ag/Cu (SAC305, CASTIN, TSC-4, 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 flux dispensing pens is recommended for dispensing precise amounts of flux to eliminate over-saturation.

CLEANING

GLOW CORE can be cleaned with saponified tap water or an alcohol and water blend. AIMTERGE 520 is recommended. A water temperature of 140°F is recommended, and should be adequate for removing any post-process residues.

PACKAGING

- GLOW CORE is standard with a 2.5% flux core.
- GLOW CORE is available in Sn/Ag/Cu, CASTIN, SN100C, and other alloys upon request.
- Standard spool sizes: ½ lb. for .010 and .015 diameters, and 1lb. for .020, .032, .040, .050 and .062 diameters. Other diameters and spool sizes are available upon special request.
- Packaging of ½ lb. and 1 lb. spools is available in 12 lb. and 24 lb. cases.

SAFETY

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

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PRODUCT TESTING RESULTS

CATEGORY:

CORED WIRE MEDIUM

NAME:

GLOW CORE

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.

Pass-Fail Criteria and Data Evaluation

Reference	Property	Pass-Fail Criteria	Result
IPC-TM-650 method 2.6.3.3. §5.5.1	Control coupons	$>1\text{E}9 \Omega$ at 96 and 168 h	PASS
J-STD-004 §3.2.4.5.1	Sample coupons	$>1\text{E}8 \Omega$ 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

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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