

SnCu0.7 CLF5013

No Clean Core Wire



Product Description

With implementation of stringent manufacturing process, Asahi has developed a wide range of wires with diverse alloys and flux types to meet the varying requirements of specialised applications. SnCu0.7 CLF5013 lead free no clean core flux solder wire is formulated using purest raw chemicals together with halide-free materials, which guarantees absolute flux core continuity and consistency in solder properties. It provides excellent instant wetting action and superior solderability on a variety of surface finishes.

Application

SnCu0.7 CLF5013 lead free no clean core flux solder wire is easy to use for automatic, manual, rework, point and brush soldering. For the best soldering results, the recommended parameters are shown:

Solder Iron Tips: All Types especially the tapered types

Soldering Temp: > 350°C

Soldering Time: 1 - 3 secs

- Keep solder iron tips clean.
- Tinned iron tips before use.
- Wear gloves when soldering to avoid contaminating the wire.

(Note: Soldering parameters are dependent on tip type, soldering station wattage configuration, wire diameter and type of applications.)

Specification

Item	Result
Alloy Composition	Sn/Cu0.7
Flux Content	2.5 ~ 3.0 ± 0.3 wt%
Density of Core Flux @ 25°C	0.866
Halide Content	Not added
JIS Z 3197 8.1.4.2.1	
Water Extract Resistivity	> 1 x 10 ⁵ Ω-cm
JIS Z 3197 8.1.1	
Surface Insulation Resistance (85°C, 85%RH, 168hrs)	> 1 x 10 ⁸ Ω, Pass
IPC-TM-650 2.6.3.3	> 1 x 10 ¹¹ Ω, Pass
JIS Z 3197 8.5.3	Pass
Electromigration (85°C, 88.5%RH, 596hrs)	Pass
IPC-TM-650 2.6.14.1	
Copper Corrosion Test	Pass
IPC-TM-650 2.6.15	
JIS Z 3197 8.4.1	
Copper Mirror Test	Classified as "M", Pass
IPC-TM-650 2.3.32	
JIS Z 3197 8.4.2	
Flux Activity Classification	ROM0
IPC J-STD-004	
Spread Factor	> 80% (SnCu0.7)
JIS Z 3197 8.3.1.1	
Residue Dryness Test	Dry
JIS Z 3197 8.5.1	
Residue Appearance	Light Yellowish

PHYSICAL PROPERTIES

Melting Temperature	227°C
Coefficient of Thermal Expansion	19.3 $\mu\text{m}/\text{m}^\circ\text{C}$
Density	7.31 g/cm^3

MECHANICAL PROPERTIES (As-Cast) (ASTM E8M 3mm/min at 23°C)

Tensile Strength	38.72 MPa
Yield Strength	32.29 MPa
Young's Modulus	6.54 GPa

RESIDUAL REMOVAL

Since the residues are light yellowish, minimal, dry, non-tacky and practically inert after soldering, removal is usually not necessary. For assemblies that require cleaning, the residue of SnCu0.7CLF5013 lead free no clean core flux solder wire can be completely removed by any solvent type flux cleaner available in the market.

STORAGE

Store the solder wire in a cool, dry and non-corrosive environment. Wrap up the solder wire when not in use to reduce exposure to environment. SnCu0.7 CLF5013 lead free no clean core flux solder wire can be kept for 2 years if proper storage conditions are observed.

HEALTH and SAFETY

Wear a chemical mask if the operators are allergic to the fumes released during soldering. For more information, please refer to Material Safety Data Sheet.

PACKAGING

SnCu0.7 CLF5013 lead free no clean core flux solder wire is commonly available in various diameters such as 0.25, 0.3, 0.4, 0.5, 0.6, 0.8, 1.0, 1.2, 1.6 and 2.0 mm. For different diameters, please specify your requirements.

Packaging	0.03kg	0.10kg	0.20kg	0.25kg	0.50kg	1.0kg
Diameter (mm)	0.25	0.3	0.4	0.5 to 2.0	0.5 to 2.0	0.8 to 2.0

DISCLAIMER OF LIABILITY

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