

SAC300-1103

Lead-free solder bar

The SAC300-1103 lead-free solder bar is meticulously engineered with a precise metal alloy composition, predominantly comprised of 97% tin (Sn) and 3% silver (Ag). This eutectic mixture is carefully formulated to achieve optimal soldering performance while adhering to global environmental standards, particularly RoHS compliance.

FEATURES

- There are few metal impurities and low oxide content, and the purity is extremely high.
- After melting, the tin liquid surface is smooth and flat, with low viscosity and excellent fluidity.
- Unique high oxidation resistance and very little tin slag.
- It has good wettability, low surface tension, easy soldering, bright and full solder spots, and stable and reliable welding quality.
- It is a green and environmentally friendly product that complies with RoHS and other environmental protection requirements.

APPLICATION

SnAg03-1103 lead-free alloy tin bars are widely used in communication equipment, instrumentation equipment, audio and video multimedia equipment, automotive industry equipment, precision welding and special welding processes such as wave soldering and manual dip soldering for household electronic and electrical equipment and other reliable electronic products, as well as spraying, electroplating and other automatic mechanical welding.

PHYSICAL PROPERTIES

Property	Value	Method
Product number	SnAg03-1103	
Alloy composition	Sn97.0 Ag3.0	
Exterior	Silver white trapezoidal cross-section long strip cast alloy	Visual
Melting point range (°C)	221-230	Alloy part
Density (g/cm ³)	7.41	Alloy part

RoHS	Pass	RoHS Directive
Shelf life	2 years	From the date of production
Packing	1kg/bar, 20kg/carton	

ALLOY COMPOSITION CONTENT

No	Items	CAS.No.	content(%)
Main alloy composition and content			
1	Tin (Sn)	7440-31-5	Remain
2	Silver (Ag)	7440-31-5	3.0±0.2
Impurity composition and content			
3	Copper (Cu)	7440-22-4	≤0.10
4	Lead (Pb)	7439-92-1	≤0.10
5	Iron (Fe)	7439-89-6	≤0.02
6	Bismuth (Bi)	7440-69-9	≤0.10
7	Antimony (Sb)	7440-36-0	≤0.10
8	Indium (In)	7440-74-6	≤0.10
9	Zinc (Zn)	7440-66-6	≤0.001
10	Gold (Au)	7440-57-5	0.05
11	Nickel (Ni)	7440-02-0	≤0.01
12	Aluminum (Al)	7429-90-5	≤0.001
13	Cadmium (Cd)	7440-43-9	≤0.002
14	Arsenic (As)	7440-38-2	≤0.03

PHYSICAL PROPERTIES

- After being used for a period of time, the composition of the solder alloy will change, causing the welding performance and mechanical properties of the solder to decline. Pure tin must be used regularly. Make adjustments to the solder alloy. (It is recommended to adjust every 10-15 days).
- Set the welding temperature according to actual use needs. The recommended welding temperature is 260~280°C. (Actual measured temperature of solder in the furnace).

The data contained in this bulletin is provided only as a guide for evaluation/consideration. These material characteristics are typical properties that are based on a limited number of samples tested in the laboratory. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any product or method. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.