

SAC305-1104

Lead-free Solder Bar

GLUDITEC presents an advanced lead-free solder bar, the SAC305-1104, boasting a meticulously crafted metal alloy composition. This solder is primarily composed of 96.5% tin (Sn), 3.0% silver (Ag), and 0.5% copper (Cu). This specific formulation, known as SAC305, represents a eutectic alloy renowned for its superior soldering characteristics and environmental sustainability.

FEATURES

- Less metal impurity and low oxide content and high purity.
- After molten tin liquid surface smooth, level off, low viscosity, excellent liquidity.
- Good wettability, surface tension is small, easy to tin, bright spot, full, welding quality is stable and reliable.
- Green environmental protection products, in line with RoHS environmental protection requirements, etc.

APPLICATION

This lead-free solder bar finds application in a diverse range of electronic manufacturing processes, including surface mount technology (SMT), through-hole soldering, and other assembly techniques. It is suitable for industries such as electronics, telecommunications, automotive, and beyond, where precision, reliability, and compliance with environmental standards are paramount.

TYPICAL PROPERTIES

Items	Technical Parameters	Standards
Part Number	SAC305-1104	/
Metal Alloy	Sn96.5Ag3.0Cu0.5	/
Appearance	Silvery White, Trapezoidal cross-section of strip casting alloys	Visual Inspection
Melting Point (°C)	217	Alloy part
Density (g/cm ³)	7.4	Alloy part
RoHS	PASS	RoHS Standard
Shelf Life	2 years	From the date of production
Packaging	20kg/box & 1kg Bar	/

ALLOY COMPOSITION

No.	Items	CAS. No	Content (%)
Key Metal Alloy			
1	Tin (Sn)	7440-31-5	Surplus Quantity
2	Silver (Ag)	7440-22-4	3.0±0.2
3	Copper (Cu)	7440-50-8	0.5±0.1
Impurity Limit			
4	Lead (Pb)	7439-92-1	≤0.07
5	Iron (Fe)	7439-89-6	≤0.02
6	Bismuth (Bi)	7440-69-9	≤0.10
7	Stibium(Sb)	7440-36-0	≤0.20
8	Indium (In)	7440-74-6	≤0.10
9	Zincum (Zn)	7440-66-6	≤0.003
10	Aurum (Au)	7440-57-5	≤0.05
11	Aluminum (Al)	7429-90-5	≤0.005
12	Cadmium (Cd)	7440-43-9	≤0.002
13	Arsenic (As)	7440-38-2	≤0.03

DIRECTION OF USES

- After using for a period of time, the composition of alloys will be changed, and that will lead to decline mechanical and welding performance, so the composition of solder alloys should be adjusted regularly by using pure tin. (Advice: every 10-15 days)
- Set soldering temperature according to the actual need. Soldering temperature is about 260-280 °C (Furnace inside practical testing temperature).

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.