

SAC0307-1215T

Lead-free Solder Wire

SAC0307-1215T Lead-free solder wire is mainly made of high-purity tin, refined by using the most advanced professional equipment of lead-free solder and excellent technology through special process. Adding microelement is to avoid the rapid expansion of micro cracks in the brittle interface organization and improve the creep-fatigue life of joints. Alloy ratio of the product is reasonable; flux is prepared of high-quality improved resin, organic activator and a variety of additives. The product is an environmentally friendly lead - free solder wire with excellent welding performance in lead-free process.

FEATURE

- The packaged solder wire is flat, smooth, uniform.
- Distribution of flux is uniform and continues. No broken core.
- Excellent electric conductivity and thermal conductivity, fast speed of tin penetration,
- No pungent smell, less smoke and small splash when soldering.
- Low residue after soldering, uniform spreading, quick drying.
- High surface insulation resistance, stable and reliable electrical properties.
- Comply with RoHS and other environmental requirements.

APPLICATION

SAC0307-1215T widely applied to communication devices, instrument equipment, automobile industry equipment, audio devices, household electrical and electronic appliances and manual and automatic soldering of other high reliable electronic products

TECHNICAL SPECIFICATION

Items	Technical	Standards
Density (g/cm ³)	7.3	/
Content of Flux (wt%)	0.0±0.0 2.0±0.5 2.5±0.5 3.0±0.5	IPC-TM-650 2.3.34.1
Melting point (°C)	217-227	/
Copper Mirror	Non penetrating corrosion	IPC-TM-650 2.3.32
Test RoHS	PASS	RoHS Directive
Continuity of Flux Distribution, Broken Hole	Continuity, no broken hole	/
Copper corrosion	No significant corrosion	IPC-TM-650 2.6.15
Test Content of Halogen	L1	IPC-TM-650 2.3.33
Expansion Rate(%)	≥75	JIS-Z-3197 8.3.1.1
Residue Dryness	Pass	IPC-TM-650 2.4.47

TYPICAL PROPERTIES

Items	Technical	Standards
Part number	SAC0307-1215T	/
Metal Alloy	Sn99.0/Ag0.3/Cu0.7	/
Appearance	Silvery white, smooth and clean surface. No crack	Visual Inspection
Diameter (mm)	0.15;0.2;0.3;0.4;0.5;0.6;0.8;1.0;1.2;1.5;2.0;3.0	Enterprise standard
Shelf Life	2 year	From the date of production
Packaging	1kg/Roll,0.5kg/Roll,10kg/Box	

ALLOY COMPOSITION

No.	Items	CAS. No.	Content(%)
Key Metal Alloy			
1	Tin (Sn)	7440-31-5	Surplus Quantily
2	Silver(Ag)	7440-22-4	0.3±0.1
3	Copper (Cu)	7440-50-8	0.7±0.1
Impurity Limit			
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	Stibium (Sb)	7440-36-0	≤0.10
8	Indium (In)	7704-74-6	≤0.10
9	Zincum (In)	7440-66-6	≤0.001
10	Aurum (Au)	7440-57-5	≤0.05
11	Aluminum (Al)	7429-90-5	≤0.001
12	Cadmium (Cd)	7440-43-9	≤0.002
13	Arsenic (As)	7740-38-2	≤0.03

DIRECTION OF USE

- Select ferrochrome head with appropriate aperture according to actual welding needs.
- The recommended set temperature of ferrochrome head is $350 \pm 20^{\circ}\text{C}$, in order to reduce the occurrence of splashing tin phenomenon.
- It is recommended to clean ferrochrome head after using for some time during welding, because a large number of tin oxide and flux residues in ferrochrome head surface attachments are easy to have adverse effects on the welding.
- It is recommended to weld at nitrogen atmosphere under conditions permitting, in order to inhibit the oxidation of base metal and solder wire and improve the welding results.
- Personal protective equipment must meet the working range safety norms; wear protective clothing and mask, so as not to scald by splashing liquated solder.
- Please refer to product MSDS for more safety information

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.