

PbAg25-1211

High temperature Resistant Leaded Solder Wire

This leaded solder wire, known as PbAg25-1211, is designed to withstand high temperatures and is made from top-quality lead ingots with added high-purity tin and silver. Utilizing advanced soldering equipment and superior technology, this product undergoes special processes to refine its composition. The alloy ratio is carefully balanced, while the flux is crafted from premium modified resin along with organic activators and additives. Overall, it offers outstanding welding performance and environmental friendliness for high-temperature applications.

FEATURES

- The coiled wire is neat, smooth, smooth, evenly wound, and will not get tangled during routing.
- The flux in the wire is evenly distributed, with good continuity and no core breakage.
- Excellent electrical conductivity and thermal conductivity, fast tin application and strong wetting power.
- No irritating smell, less smoke and less spatter during welding.
- Less residue after welding, even spreading and quick drying.
- After welding, the surface insulation resistance is high and the electrical performance is stable and reliable.
- It is a green and environmentally friendly product that complies with RoHS and other environmental protection requirements.

APPLICATION

PbAg25-1211 solder wire, known for its high-temperature resistance, is extensively employed for soldering high-temperature components and operating in elevated temperature environments. It is also utilized for electronic component analysis and section welding.

GENERAL PROPERTIES

Items	Technical Parameters	Standards
Part Number	PbAg25-1211	/
Metal Alloy	Pb92.5/Sn5/Ag2.5	/
Exterior	Silvery white, smooth and clean surface, no crack.	Visual Inspection
Diameter (mm)	0.5; 0.76 etc.	/
Shelf Life	2 years	From the date of production

Storage	Store at room temperature, in a dry and non-corrosive environment	/
Packaging	500g / Roll, 5kg/Box	/

TYPICAL TECHNICAL PROPERTIES

Items	Technical Parameters	Standards
Content of Flux (wt %)	2.0±0.5 2.5±0.5 3.0±0.5	IPC-TM-650 2.3.34.1
Melting Point (°C)	288 - 298	/
Copper Mirror Test	Non-penetrating corrosion	IPC-TM-650 2.3.32
RoHS	Qualified	RoHS Directive
Continuity of Flux Distribution, Broken Hole	Uniform and continuous, no gaps	GB/T 20422-2006 5.7/5.8
Copper Corrosion Test	No significant Corrosion	IPC-TM-650 2.6.15
Content of Halogen	L1	IPC-TM-650 2.3.33
Expansion Rate (%)	≥70	JIS-Z-3197 8.3.1.1
Residue Dryness	The surface of the flux residue should be free of stickiness sex, chalky on the surface should be easily removed	IPC-TM-650 2.4.47

ALLOY COMPOSITION

No.	Items	CAS. No.	content(%)
Main alloy composition and content			
1	Lead (Pb)	7439-92-1	margin
2	Tin (Sn)	7440-31-5	5.0±0.5
3	Silver (Ag)	7440-22-4	2.5±0.2
Impurity Limit			
4	Aluminum (Al)	7429-90-5	≤0.005
5	Iron (Fe)	7439-89-6	≤0.02
6	Bismuth (Bi)	7440-69-9	≤0.08
7	Zincum (Zn)	7440-66-6	≤0.002
8	Sulfur (S)	7704-34-9	≤0.020
9	Cadmium (Cd)	7440-43-9	≤0.005
10	Arsenic (As)	7440-38-2	≤0.03
11	Copper (Cu)	7440-50-8	≤0.05
12	Antimony (Sb)	7440-36-0	≤0.3
13	Except Sb, Bi, Cu, impurities sum		≤0.08

DIRECTION OF USES

- Based on actual welding needs, select a ferrochrome head suitable for large and small apertures.
- It is recommended that the temperature of the soldering iron tip be set at 400±20°C to achieve the optimal melting state of the tin wire and reduce the occurrence of tin splashing.
- During the welding process, since the surface attachment of the soldering iron tip contains a large amount of tin oxide and flux residue, it is easy to cause undesirable welding problems.
- It is recommended to clean the soldering iron tip after using it for a period of time.
- By keeping the welding atmosphere in a low-oxygen state, it can inhibit the oxidation of the base metal and tin wire, thereby improving the quality of tin welding. It is recommended to use nitrogen working atmosphere for welding when conditions permit.
- Personal protective equipment must meet the safety regulations in the work area. Wear protective clothing and protective shields to avoid welding in the form of splashing solutions. Materials may cause burns, please refer to the MSDS of this product for more safety protection 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.