

SN42/BI57/AG1 SOLDER ALLOY

FEATURES

- Lead-Free Alloy
- High Purity
- Low Melting Temperature 138°C
- Good Fatigue Characteristics
- Density of 8.6 g/cm³

DESCRIPTION

Sn42/Bi57/Ag1 is composed of 42 percent Tin, 57 percent Bismuth and 1 percent silver. Typical applications include lead-free electronics assembly, second-sided reflow, and other low-temperature soldering applications. This alloy is available in solid wire and solder paste. Sn42/Bi57/Ag1 has shown to offer superior fatigue characteristics as compared to Sn42/Bi58. Sn42/Bi57/Ag1 has a melting temperature of 138°C (280°F).

IMPURITY LEVELS TO IPC-J-STD-006 IN PERCENT

Impurity Levels To IPC-J-STD-006 ⁺ In Percent		
Fe: 0.05	Cd: 0.01	Cu: 0.08
Al: 0.005	In: 0.01	Sb: 0.50
Ni: 0.05	Zn: 0.005	Pb: 0.10

MAJOR ALLOY INGREDIENTS IN PERCENT

Sn	Bi	Ag
42 ± 0.5	57 ± 0.5	1 ± 0.2

HANDLING & STORAGE

If this alloy is used in wire solder, the product will have a shelf life of 7 years when stored in environmentally controlled conditions. Consult the Material Safety Data Sheet for specific handling procedures.

FLUX COMPATIBILITY

Sn42/Bi57/Ag1 is compatible with most electronic grade fluxes.

CLEANING

Refer to data sheets provided by flux manufacturer.

SAFETY

Use with adequate ventilation and proper personal protective equipment. Refer to the accompanying Safety Data Sheet for any specific emergency information. Do not dispose of any hazardous materials in non-approved containers.

⁺Current Revision

*All information for reference only. Not to be used as incoming product specifications or for process design. Consult Certificate of Analysis for product specific information.

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