Solder plus Support

IN50/PB50 ALLOY

FEATURES

- Good Thermal Fatigue Resistance
- High Ductility
- Melting Temperature 180°-210° C
- Low Gold Embrittlement

DESCRIPTION

50% indium / 50% lead and other indium/lead alloys are typically used in applications requiring a highly ductile alloy. Applications include, cryogenic seals, soldering to gold when embrittlement and dissolution are a concern. AIM metallurgists and manufacturing processes ensure material meets ASTM and IPC-J-STD-006.

STANDARD AVALIABILITY

50% indium / 50% lead is available in wire and solder paste (RMA201).

PHYSICAL PROPERTIES

Characteristic	Result
Melting Range	Solidus: 180°C Liquidus: 210°C
CTE (@ 20°C, ppm/°C)	27
Tensile Strength (PSI)	4,670
Shear Strength (PSI)	2,680

REFLOW DATA

Refer to RMA201 solder paste data sheet.

HANDLING & STORAGE

Consult the Material Safety Data Sheet for specific handling procedures. Indium/lead alloys should be stored in a dry temperature controlled room or in an inert atmosphere, as indium alloys will corrode in humidity. Any device used in high humidity applications, or having potential exposure to condensation, should be conformal-coated.

CLEANING

Contact AIM for cleaning information.

SAFETY

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