SOLDER CONNECTION



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Technical Bulletin

TSC PURALLOY 62/36/2 SOLDER ALLOY

DESCRIPTION

TSC Puralloy® 62/36/2 is a leaded, silver bearing solder alloy which continues to be used extensively within the microelectronics sector, used primarily to solder components on to silver-coated surfaces such as silver fired conductors on to ceramic substrates. The addition of silver to the Sn/Pb soft solder alloy greatly reduces the potential of erosion or migration of the silver element of the coating.

Silver will migrate into the tin at around 2%, therefore the additional of silver within the alloy will buffer this action. The presence of silver also enhances the alloys mechanical properties including the joint strength due to the formation of the ductile Ag/ Sn intermetallic. This solder is very close to being a eutectic alloy and exhibits excellent wetting and capillary action together with good cosmetics and a lower melting range.

TSC PURALLOY 63/37 solder alloy is available in 1 kg Bars, 3kg Ingots and Feed Wire. Chunks are also available to assist in new pot fills on request.

Product Features & Benefits

- Liquidus 183°C
- Prevents dissolution of silver away from the solder joint.
- Excellent mechanical properties.
- Very good wetting and capillary action.
- Low melting point range.
- Extensively used in the micro-electronic and hybrid industry
- Available in a range of formats including Bar, Tinman Sticks, Blowpipe and Feed Wire

TYPICAL COMPOSITION

Typical Alloy Composition			
Sn: 62.0	Pb: 36.0	Ag: 2.0	

MELTING TEMPERATURE RANGE

Typical Melting Temperature

179°C

TECHNICAL DATA

Density (g/cm3)	Specifications 8.41
Electrical Resistivity (micro-ohms/M)	0.145
Thermal Conductivity (W/m/K)	50
Tensile Strength (Kgf/cm2)	490
Brinell Hardness (HB)	16

HANDLING & STORAGE

Indefinite shelf life applies to solid solder. For other product categories, refer to those specific TDSs. Consult 63/37 MSDS for additional handling procedures and precautions.

HEALTH & 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.

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