

ALPHA[®] SN42 BI57.6 AG.4 SOLDER WIRE

Lead-Free Solid Solder Wire

DESCRIPTION

ALPHA Sn42 Bi57.6 Ag.4 Solid Solder Wire is primarily used for rework operations and touch up soldering of SnBiAg based electronics assemblies.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

- Provides Sn42 Bi57.6 Ag.4 alloy in a convenient to use wire form.
- Available in various diameters of wire that are suitable for electronics assembly processes.
- Easier to use and more versatile than SnBiAg alloy Solid Solder Sticks
- Enables rework of SnBiAg alloy solder joints while maintaining the original alloy composition. This avoids the need for additional reliability testing of solder joints reworked with an alternative alloy.

PRODUCT INFORMATION

Alloy: Sn42% Bi57.6% Ag.4%
Diameters: 0.6mm. Other diameters available on request.
Packaging: 0.25kg Spool; 5kg Box

APPLICATION GUIDELINES

There is no “ideal” tip temperature, since that will depend on what you are soldering, and how thermally demanding the assembly is. In general, tip temperatures of between 200 °C and 300 °C would be appropriate.

For fluxing, ALPHA HF-1 Flux Gel is available in 30g syringes and 100g jars for use with ALPHA Sn42 Bi57.6 Ag.4 Solid Solder Wire.

All components used with ALPHA Sn42 Bi57.6 Ag.4 Solid Solder Wire must be lead-free to eliminate the formation of tin/lead/bismuth intermetallic which has a melting point under 100 °C.

TECHNICAL DATA

Item	Typical Values
Melting Point	137.1 °C
Thermal Conductivity	24.5 W/M/K
Coefficient of Thermal Expansion	17.1 ppm/°C
Ultimate Tensile Strength	67 MPa

RECYCLING SERVICES

We provide safe and efficient recycling services to help companies meet their environmental and legislative requirements and at the same time, maximize the value of their waste streams. Our service collects solder dross, solder scrap, and various forms of solder paste waste. Please contact your local sales representative for recycling capabilities in your area or [link here](#).



SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available at MacDermidAlpha.com/assembly-solutions/knowledge-base.**

STORAGE

When properly stored (ambient temperatures and dry) a shelf life of 1 year is guaranteed.

CONTACT INFORMATION

**To confirm this document is the most recent version, please contact
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www.macdermidalpha.com**

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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