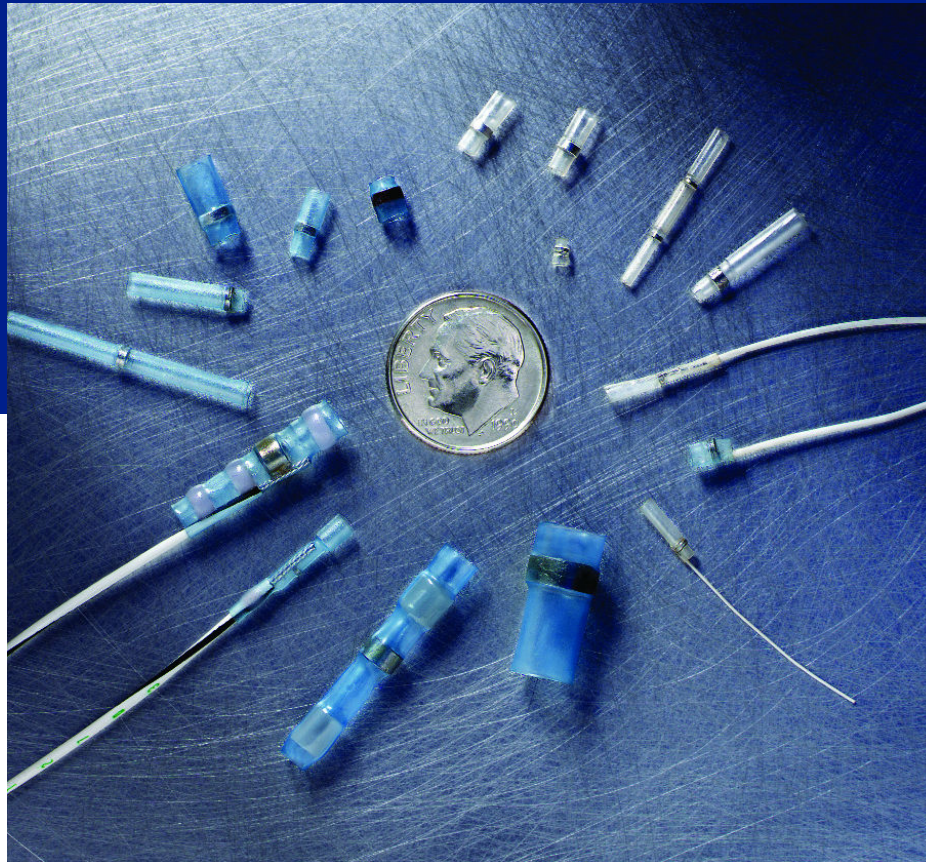


# Solder Termination Sleeves - STS



EFFICIENCY • PRODUCTIVITY • QUALITY

# Wire and Cable Terminations



**RELIABLE • INSPECTABLE • REPEATABLE**

**Sumitomo Solder Termination Sleeves open new possibilities to a variety of processes within many different industries. We offer solutions to your company's most stringent demands for reliability, repeatability, and inspectability of solder connections used in your products.**

Your company must produce as many flawless products as possible. In order to minimize variability, increase production rates, and enable operators to do every aspect of assembly more efficiently, the right parts and tools are needed. Using STS products, assembled to the rigorous standards of SAE-AS83519 ensures connections that are completely insulated, encapsulated and strain relieved every single time. Operators do not need any specialized tools or require extensive training.

Let us show you how we can support you in meeting the soldering challenges you are facing.

Solder Termination Sleeves are designed with fundamental features that simplify product assembly. The main parts are the pre-assembled outer heat-shrinkable jacket with pre-fluxed solder, thermoplastic sealing rings and, if needed, a pre-installed ground lead.

**We offer solutions to these basic kinds of soldering operations:**

- 1. Shield termination**
- 2. Wire to wire splicing**
- 3. Wire to pin terminations**

# Features



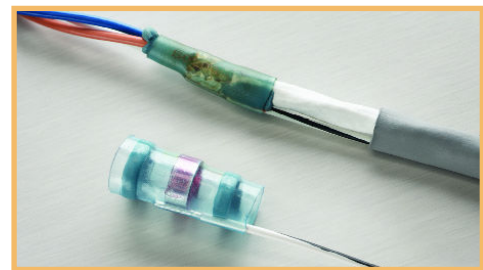
## TERMINATE SHIELDS • SPLICE • WIRE TO PIN

### The detail with which we design our parts brings many advantages to our customers:

The outer heat-shrinkable jacket is a precision-engineered high performance fluoroplastic sleeve containing an exactly measured amount of pre-fluxed solder that assures a perfect connection every time. The need for individual parts, solder and flux is eliminated. Just slide the correct STS component in place and apply infrared or convection heat.

Space saving properties and uniformity of connections are becoming more important. Conventional hand-soldering methods can produce inconsistent results that can't compete with our standardized designs.

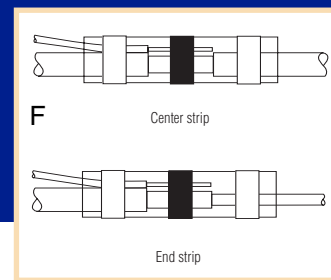
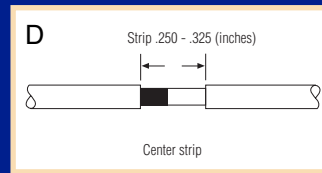
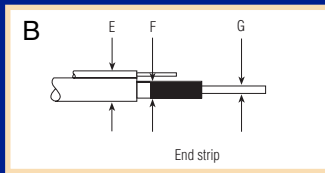
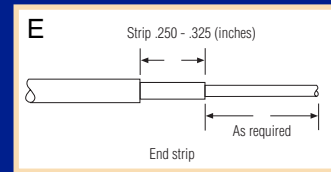
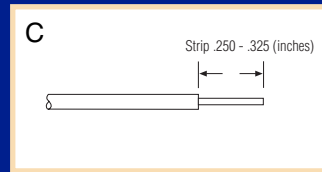
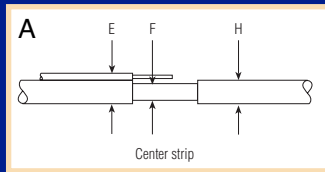
The thermoplastic sealing rings at each end of many STS products melt and flow during the heating process. They form an environmental seal that meets key industry standards.



On many STS parts a special thermochromic coating on the solder preform changes color when it reaches the optimum temperature. This makes it easy for the operator to know when the proper amount of heat has been applied. This feature, plus the transparency of the sleeve make inspection simple. In one glance, it is possible to verify that the solder has melted, flowed, and is evenly distributed. Many STS products have a permanent identification number for easy recognition.

If a ground lead is required, STS series parts with pre-installed leads greatly simplify installation. Parts with pre-installed ground leads improve ease of handling by eliminating incorrect lead positioning, thereby further assuring a reliable, inspectable connection.

# Typical Installation



## TERMINATING ASSEMBLY

Take the craft sensitivity and guesswork out of your critical solder connections.

### Size Selection

To determine which size terminator best meets your requirements:

1. Determine cable dimensions, either "center strip" or "end strip", using the diagrams figures A and B.
2. Refer to cable dimension on STS Specification Drawings.

### Installation Instructions

Preparation of ground lead (if required)  
Strip insulation as shown in figure C.

Preparation of shielded cable  
Strip insulation as shown in figure D center strip  
or figure E end strip.

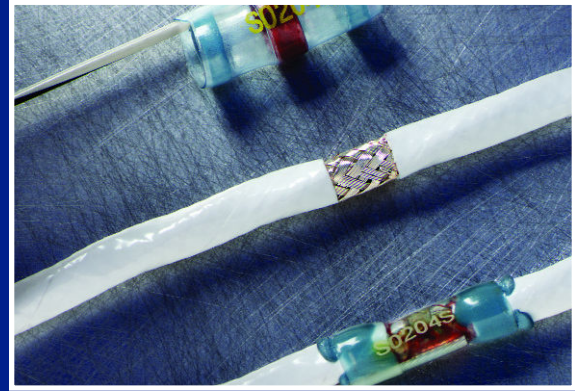
### Termination Assembly

Assemble components as shown in figure F.  
Make sure no loose strands are present.  
Ground lead may be front or rear entry.

### Heating of Assembly

1. Use one of your preferred heating tools with appropriate reflector.
2. Direct heat, either infrared or conventional, at solder preform until substrates have wet and a proper fillet is formed.
3. If necessary apply heat to remainder of device to assure proper installation.

# Time and Cost Saving



**CONSISTENT RESULTS • SMALLER INVENTORY**

**Today's manufacturers require flexibility, efficiency, and productivity. Saving cost and time is essential. We can assist you with both.**

STS parts come pre-assembled and offer the following benefits:

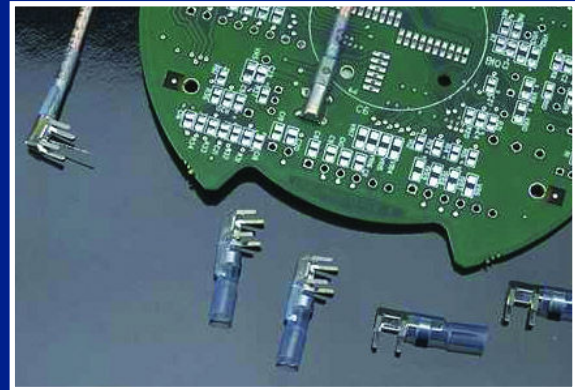
1. Increased productivity and reliability
2. Reduced scrap
3. Reduced labor and training costs
4. Inventory reduction and simplified inventory management

Sumitomo Solder Termination Sleeves are available in a virtually unlimited range of sizes and custom designs. In many applications, one size can be used on a variety of different sized wires and cables.

STS series products are made by Sumitomo Electric, a global leader in heat-shrinkable materials technology. Versatile, rugged, cost effective, and simple to use, STS products have demonstrated proven reliability in applications worldwide.

# Custom Designs

- Industry-leading design expertise
- Wide range of pre-installed lead wires or braid styles
- Special sizes, geometries, and types



# Standard Lines

NAS 1744

NAS 1745

NAS 1746

High Temperature Infrared 150°C (H-I Series)

High Temperature Convection 150°C (H-C Series)

Low Temperature Convection 105°C (L-C Series)

STS with Sealing Inserts, AS83519 (H-M Series)

STS with Pre-installed Leads, AS83519 (H-ML Series)

STS with Pre-installed Braids (H-MB Series)

STS Coaxial Terminators

STS Splicing Sleeves

STS Wire To Pin Sleeves

**To contact your authorized representative,  
or get more information on STS products:  
Call (07) 5549 0077**

## AEROSPACE AND DEFENCE AUSTRALIA

No.14/18 Blanck Street  
Motorway Business Park  
Ormeau QLD Australia 4208  
Tel (07) 5549 0077  
Fax (07) 5549 0088  
[www.aerodefence.com.au](http://www.aerodefence.com.au)



The information contained in this brochure is believed to be correct and in accordance with accepted engineering practices. Because of the varied nature of the uses for these products each user should make their own evaluations regarding the suitability of these products for their specific application. Sumitomo Electric Interconnect Products, Inc. makes no warranties regarding the accuracy and completeness of the information and data contained herein, and disclaims any liability from the use or misuse of its products. Sumitomo Electric Interconnect Products, Inc. shall not be liable for any injury, loss or damage either directly, indirectly or as a consequence arising from the use or misuse of its products mentioned in this brochure, other than replacement of materials considered defective.

All trademarks and registered trademarks are property of their respective owners.

© 2005 Sumitomo Electric Interconnect Products, Inc.  
All rights reserved.

Rev. 5/2005