

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

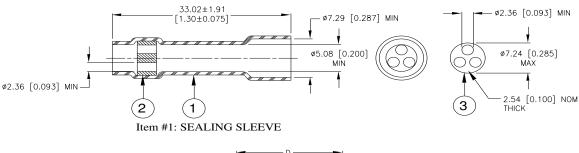
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

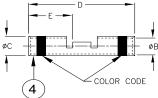






## **CUSTOMER DRAWING**





Item #2: CRIMP SPLICE

## **MATERIALS**

- 1. INSULATION SLEEVE: Heat-shrinkable, transparent blue, radiation cross-linked modified polyvinylidene flouride.
- 2. INTEGRAL MULTI-WIRE SEAL: Low outgassing immersion resistant thermoplastic fluoroelastomer. Color: BLUE.
- 3. SEPARATE MULTI-WIRE SEAL: Low outgassing immersion resistant thermoplastic fluoroelastomer. Color: BLUE.
- 4. CRIMP SPLICE: Base Metal: Copper Alloy 101 or 102 per ASTM B-75.

Plating: Nickel per SAE AMS-QQ-N-290.

Color Code: See table below.

#### Dimensions:

| Part     | Crimp Splice        |                     |               |              |            |  |
|----------|---------------------|---------------------|---------------|--------------|------------|--|
| Name     | øB                  | øС                  | D             | E            | Color Code |  |
| D-436-88 | <u>1.27</u> [0.050] | 2.03 [0.080]        | 12.95 [0.510] | 6.22 [0.245] | Red        |  |
| D-430-88 | 1.14 [0.045]        | 1.91 [0.075]        | 12.45 [0.490] | 5.72 [0.225] | Keu        |  |
| D-436-89 | <u>1.75</u> [0.069] | <u>2.70</u> [0.106] | 14.86 [0.585] | 7.11 [0.280] | Blue       |  |
| D-430-69 | 1.63 [0.064]        | 2.57 [0.101]        | 14.35 [0.565] | 6.60 [0.260] | Diue       |  |
| D-436-90 | <u>2.60</u> [0.102] | 3.91 [0.154]        | 14.86 [0.585] | 7.11 [0.280] | Yellow     |  |
|          | 2.46 [0.097]        | 3.73 [0.147]        | 14.35 [0.565] | 6.60 [0.260] | renow      |  |

| TE Connectivity  |  |                         |                      | Raychem<br>Devices         | IN-LINE SPLICE SEALING SYSTEM, MULTI-WIRE SPLICER NICKEL PLATED, COLOR CODED, WITH INSPECTION SLOTS |  |  |
|--|--|-------------------------|----------------------|----------------------------|---|--|--|
| Unless otherwise specified dimensions are in millimeters. [Inches dimensions are shown in brackets]  |  |                         |                      | DOCUMENT NO.: <b>D-4</b> 3 | 36-88/-90   |  |  |
| TOLERANCES: ANGLES: N/A  0.00 N/A  0.0 N/A  0.0 N/A  ROUGHNESS IN  MICRON  TE CONNECTIVITY (TE) RESERVES THE RIGHT TO CHANGE THIS DRAWING AT ANYTIME. USER SHOULD EVALUATE THE SUITABILITY OF THE PRODUCT FOR THEIR APPLICATION. |  |                         | DATE: April 10, 2017 | REVISION:                  | C1  |  |  |
|  |  | NUMBER:<br>CO-17-004936 | SCALE: None          | SIZE:                      | SHEET:<br>1 of 2  |  |  |

## **CUSTOMER DRAWING**

#### Installation Data:

| Dont         | Wire Size Range of Crimp Splice (AWG) |         |             |         |  |  |
|--------------|---------------------------------------|---------|-------------|---------|--|--|
| Part<br>Name | Two                                   | wires   | Three wires |         |  |  |
| Name         | Minimum                               | Maximum | Minimum     | Maximum |  |  |
| D-436-88     | 26                                    | 24      | 28          | 24      |  |  |
| D-436-89     | 24                                    | 20      | 24          | 22      |  |  |
| D-436-90     | 22                                    | 16      | 22          | 18      |  |  |

## MIL Spec equivalent size and wire accomodation:

| Part     | MIL Spec        | Wire Size   | Wgt. Lbs/Mpc |
|----------|-----------------|-------------|--------------|
| Name     | Equivalent Size | Range (AWG) | max          |
| D-436-88 | M81824/1-1      | 26 - 20     | 1.02         |
| D-436-89 | M81824/1-2      | 20 - 16     | 1.61         |
| D-436-90 | M81824/1-3      | 16 - 12     | 2.72         |

#### APPLICATION

- 1. These parts are designed to provide immersion resistant in-line splices of 2 or 3 to 2 or 3 wires falling within the size range listed on sheet 1, having nickel-plated conductors and insulations rated for at least 135 → C.
- 2. Parts are available only as an assembly of one of each Item #1 and Item #2.
- 3. Parts are to be installed per assembly procedure as outlined below.
- 4. Inside diameter and outside diameter of splice are to be measured in crimp area, 2.54 to 5.08mm [0.100 to 0.200in] from ends of part. Slight burr permitted on parted surfaces.
- 5. Acceptance sampling shall be in accordance with Paragraph 4.6.1 of SAE AS81824.
- 6. Packing and packaging shall be in accordance with Section 5, Level C, of SAE AS81824.
- 7. This document takes precedence over documents referenced herein.

### **ASSEMBLY PROCEDURE**

#### 1.0 SCOPE

This document outlines the procedure to be followed to obtain immersion resistant multiple wire butt splices using Multi-Wire In-Line Splice Sealing system D-436-88/-90.

#### 2.0 PROCEDURE

- a) Pass the wires to be attached to one barrel through the separate multi-wire seal (3). Pass the wires to be attached to the other barrel through the sealing sleeve from the three hole insert end.
- b) Strip wires 5/16" to 11/32" and crimp into splice using a Raychem AD-1377 crimp tool. Care must be taken so that the wires remain untwisted between the splice and the separate multi-wire seal (3) or the sealing sleeve cannot be positioned properly.
- c) Position the separate multi-wire seal (3) as close as possible to the splice. Hold this piece in position by squeezing the wires directly behind it, and slide the sealing sleeve over the assembly so that the separate multi-wire seal (3) is as far inside the sleeve as possible.
- d) Apply heat, using the recommended heat source, first to the separate multi-wire seal end, and then to the other. Heat should be applied until insert melts and flows axially along the wire.

## 3.0 RECOMMENDED RAYCHEM HEATING TOOLS

| Heater           | Reflector  | Recommended setting         |
|------------------|------------|-----------------------------|
| Steinel HL-2010E | 832011-000 | 600°C-700°C (1112°F-1292°F) |
| Heat Gun CV-1981 | PR52D      | 7.5 - 8                     |
| Steinel HL-1802E | PR52D      | 8 - 9                       |

\*Unless otherwise specified, dimensions are in millimeters. [Inches dimensions are shown in rackets]

| DOCUMENT NO.: | ECO NUMBER:   | REVISION: | DATE:          | SHEET: |
|---------------|---------------|-----------|----------------|--------|
| D-436-88/-90  | ECO-17-004936 | C1        | April 10, 2017 | 2 of 2 |