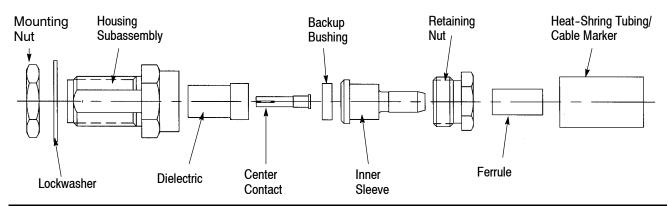
# SMA Bulkhead Feedthrough Cable Jack Connectors



TE Connectivity (TE) Part Number	Previous Part Number	Description	Cable
1051933-1	2034 5005 00	SMA Bulkhead Feedthrough Cable Jack Connector	RG174/U, 179,
1051934-1	2034 5005 02	SMA Bulkhead Feedthrough Cable Jack Connector	187, 188, 316

Figure 1

#### 1. INTRODUCTION

This instruction sheet contains the assembly procedure for the SMA Bulkhead Feedthrough Cable Jack Connectors listed in Figure 1. These are crimp-type attachment connectors that attach to the cable listed in Figure 1.

The table in Figure 2 represents tool numbers applicable to this instruction sheet.

NOTE

Unless otherwise stated, dimensions on this instruction sheet are in millimeters [with inches in brackets]. Figures are not drawn to scale.

Tool Description	TE Part Number	Previous Part Number
Center Contact Holder	1055454-1	2098 5221 10
Crimp Tool	1055236-1	2098 0105 54 (Die No. C)

Figure 2

Reasons for revision can be found in Section 4, Revision Summary.

#### 2. DESCRIPTION

Each connector assembly consists of a mounting nut, a lockwasher, the housing subassembly, a dielectric, the center contact, backup bushing, inner sleeve, ferrule, retaing nut, and heat-shrink tubing. See Figure 1.

#### 3. ASSEMBLY PROCEDURES

### 3.1. Preparing the Coaxial Cable End (Figure 3)

- 1. Place the heat-shrink tubing and ferrule on the cable.
- 2. Remove the end portion of the cable jacket to expose the cable braid (outer conductor).
- 3. Trim the cable braid to length.
- 4. Flare the cable braid.

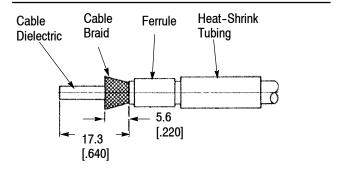


Figure 3

#### 3.2. Crimping the Cable to the Inner Sleeve (Figure 4)

- 1. Insert the inner sleeve into the retaining nut.
- 2. Position the loose unit on the dielectric as shown in Figure 4.
- 3. Slide the ferrule over the flared portion of the cable braid.



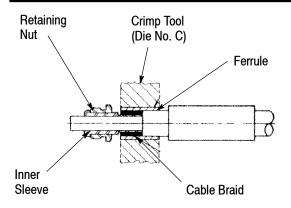


Figure 4

- 4. Hold the retaining nut (seated) and crimp the ferrule in place.
- 5. Trim and remove the excess braid strands.

## **3.3. Soldering the Center Contact to the Cable Inner Conductor** (Figure 5)

- 1. Trim the cable dielectric flush with the end of the inner sleeve to expose the inner conductor.
- 2. Place the back-up bushing on the inner conductor.

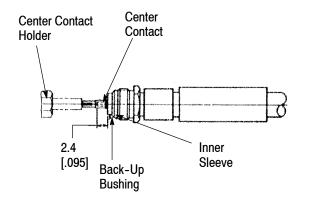


Figure 5

- 3. Trim and de-burr the inner conductor projection to length, as shown in Figure 5.
- 4. Tin the inner conductor.
- 5. Place the center contact in the holder.
- 6. Heat the center contact with a soldering iron and carefully push it over the center conductor until it rests firmly against the bushing.
- 7. Remove the excess solder or spatter.

# 3.4. Securing the Housing to the Inner Sleeve Sub-Assembly and Shrink Tubing (Figure 6)

- 1. Assemble the dielectric over the center contact.
- 2. Engage the threads of the inner sleeve sub-assembly to the housing and tighten to approximately 12-15 in.-lbs.
- 3. Position the shrink tubing over the ferrule as shown in Figure 6.
- 4. Apply indirect heat to shrink the tubing.

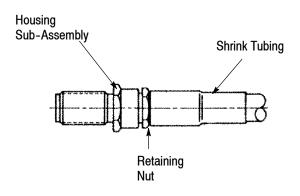


Figure 6

### 3.5. Inspecting the Completed Assembly

Adherence to the procedures above should yield the tolerances shown in Figure 7.

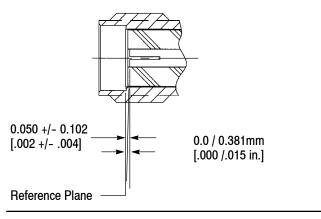


Figure 7

### 4. REVISION SUMMARY

- Updated document to corporate requirements
- New loao

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