

TYCO ELECTRONICS PART NUMBER	DESCRIPTION	CABLE TYPE	REQUIRED TOOLING
1051686-1	SMA Straight Cable Cable Plug (Crimp Attachment)	RG178/U, 196 OSMT Cable	Center Contact Holder (T-4578) -- 1055454-1
1051687-1	SMA Straight Cable Cable Plug (Crimp Attachment)		Crimp Tool -- 1060713-1
			Crimp Die -- .105 In. Hex

Figure 1

1. INTRODUCTION

This instruction sheet contains the assembly procedures for the SMA Straight Cable Plugs shown in Figure 1. These plugs are a crimp attachment type connector that attach to the cable listed in Figure 1.

Refer to the tooling (and applicable instructions) also listed in Figure 1.

Revision information can be found in Section 3.

NOTE *Dimension on this sheet are in millimeters [with inches in brackets], unless otherwise specified. Drawings are not to scale.*

2.2. Crimping the Cable to the Inner Sleeve

1. Insert the inner sleeve into the retaining nut.
2. Position the loose unit on the cable dielectric and seat it firmly.
3. Slide the outer sleeve over the flared portion of the cable braid.
4. Hold the cable (seated firmly) and crimp the outer sleeve in place. See Figure 3.
5. Trim and remove the extra cable braid strands.
6. Trim the cable dielectric flush with the end of the inner sleeve to expose the cable *inner* conductor. See Figure 3.

2. ASSEMBLY

2.1. Preparing The Coaxial Cable End

1. Place the heat-shrink sheath and outer sleeve on the cable.
2. Strip the end portion of the cable, to expose the cable braid. Refer to Figure 2.
3. Trim the cable braid to length.
4. Flare the braid.

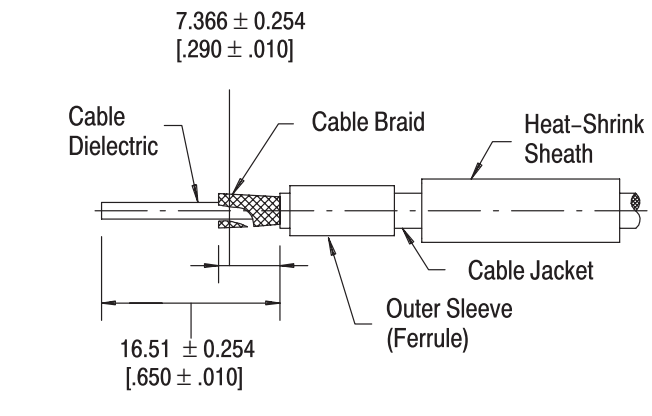


Figure 2

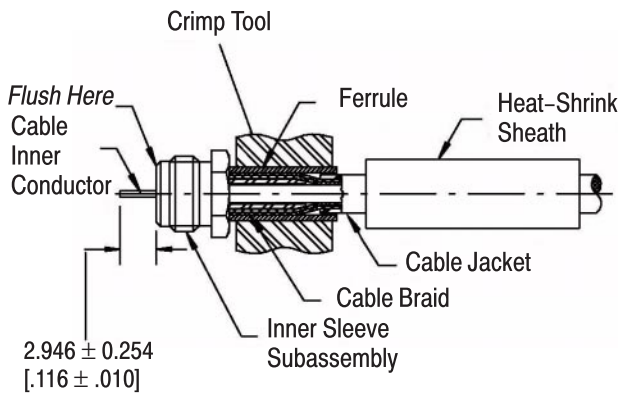


Figure 3

2.3. Soldering Center Contact to Inner Conductor



Be sure to follow all local safety practices when working with solder.

1. Tin the inner conductor of the cable.
2. Place the rear dielectric onto the cable inner conductor.
3. Place the center contact in the holder (Figure 4), heat the conductor of the cable with the large diameter of the contact resting firmly against the rear dielectric.
4. Remove excess solder.



To avoid damage to the cable when using OSMT cable, minimize the time when soldering and/or heat-shrinking the connector to the cable. Avoid direct heat on the exposed cable jacket.

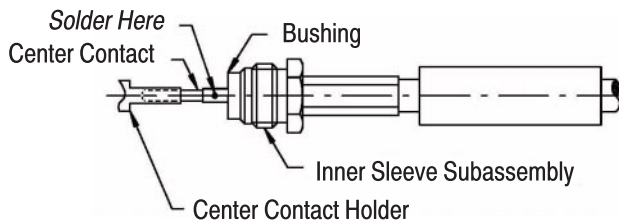


Figure 4

2.4. Securing Housing to Inner Sleeve Subassembly

1. Assemble the dielectric over the center contact.
2. Engage the threads of the inner sleeve subassembly to the housing and torque to 12 to 15 inch-pounds
3. Position the heat-shrink sheath over the the outer sleeve (ferrule) as shown in Figure 5.

4. Apply indirect heat with a heat gun to shrink the sheath

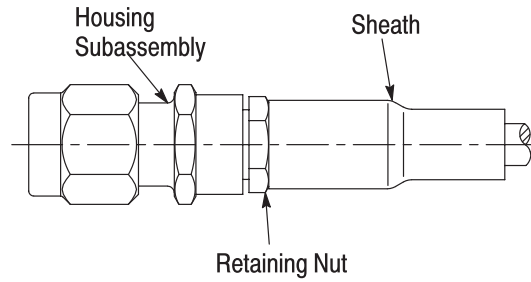


Figure 5

2.5. Completed Assembly

Adherence to the previous steps should result in the tolerances shown in Figure 6.

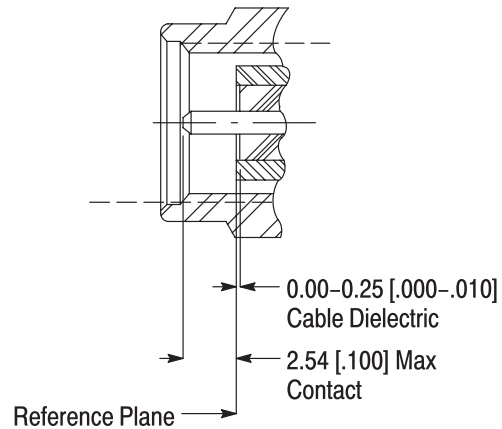


Figure 6

3. REVISION SUMMARY

Since the previous release of this document:

- The format has been changed to the current corporate requirements
- Dimensions have been clarified.