50-Ohm SMB, 75-Ohm SMB, and 75-Ohm Mini-SMB Right-Angle Cable Plugs

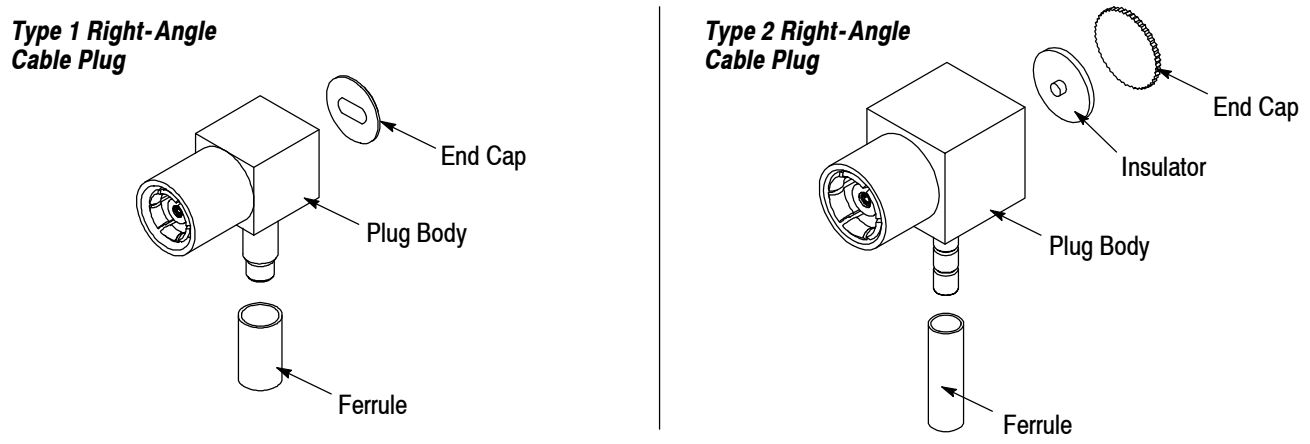


Figure 1

1. INTRODUCTION

This instruction sheet contains the assembly procedures for 50-Ohm SMB and 75-Ohm SMB Right-Angle Cable Plug Connectors; as well as 75-Ohm Mini-SMB Right-Angle Connectors. These connectors are crimped onto flexible coaxial cable using the tooling listed in Figure 2. For detailed crimping procedures, refer to the instructions packaged with the tooling.

The connectors on this sheet are categorized as either Type 1 or Type 2 Right-Angle Cable Plugs. Refer to Figure 1.

For detailed application requirements and information on part numbers not listed, call PRODUCT INFORMATION at the number at the bottom of this page.

NOTE

Dimensions in this instruction sheet are in millimeters [with inches in brackets]. Figures are not drawn to scale.

Reasons for reissue of this instruction sheet are provided in Section 4, REVISION SUMMARY.

2. DESCRIPTION

These cable plugs are supplied as kits consisting of a plug body, end cap, and ferrule. The 75-ohm cable plug also includes an insulator.

3. ASSEMBLY PROCEDURE

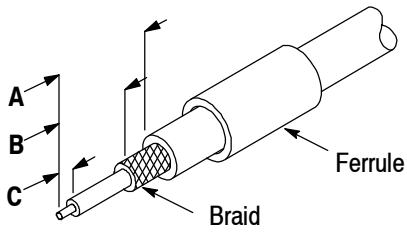
1. Slide the ferrule over the cable jacket. Strip the cable according to the appropriate dimensions provided in Figure 3. Flare the cable braid by rotating the cable dielectric. Be careful not to nick or cut the center conductor or braid.

2. Insert the cable into the tail-end of the plug body until the center conductor is positioned in the slot of the contact. Make sure that the cable braid is positioned over the tail-end of the plug body as shown in Figure 4, Detail A.

CABLE PLUG TYPE (SMB)	RG/U CABLE	TOOLING			
		PRO-CRIMPER* III FRAME ASSEMBLY 354940-1		DANIELS TOOL HX4 Military M22520/5-01	
		Die Assembly	Position	Hex Die Set	Position
50-Ohm	174, 188, 316	58483-1	.128 (B)	Y-1637	.128
	174, 188, 316 (All Double Braid)		.151 (C)		.151
	178, 196		.105 (A)		.105
Mini 75-Ohm	179, 187	58483-1	.128 (B)	Y-1637	.128
75-Ohm	179, 187	58483-1	.128 (B)	Y-1607	.128

Figure 2

Recommended Strip Length **Note:** Not to Scale



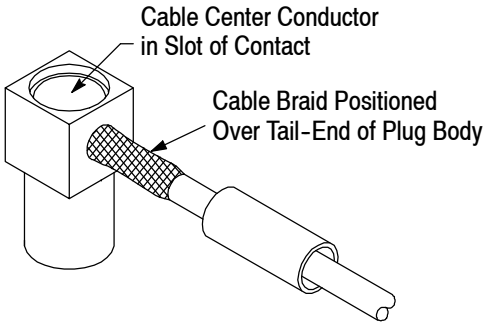
CABLE PLUG IMPEDANCE	DIMENSION ±0.25 [±.010]		
	A	B	C
SMB 50-Ohm and Mini-SMB 75-Ohm	10.16 [.400]	4.06 [.160]	1.27 [.050]
SMB 75-Ohm	12.70 [.500]	6.35 [.250]	1.90 [.075]

Figure 3

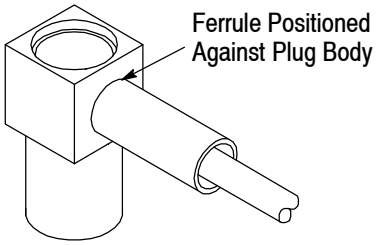
3. Hold the cable securely in place, and solder the center conductor to contact using standard soldering techniques. Remove any flux residue.

4. Slide the ferrule over the cable braid until it is positioned against the plug body. See Figure 4, Detail B.

Detail A



Detail B



Detail C

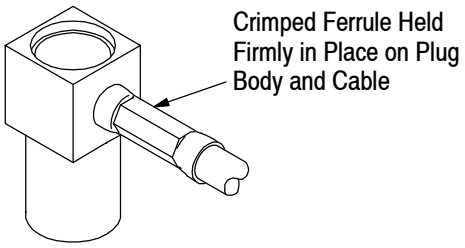


Figure 4

5. Crimp the ferrule using the appropriate tooling. A properly crimped ferrule is shown in Figure 4, Detail C.

CAUTION

When crimping the ferrule, make sure that there is nothing on the tool or die that could interfere with the front of the plug body. This will cause bending or breaking of the crimped portion.

6. For Type 1 right-angle cable plugs, position the end cap into counterbore of the plug body with the convex side out. See Figure 5. For Type 2 right-angle cable plugs, place the insulator then the end cap into counterbore of the plug body. See Figure 6.

7. Using a 4.70 [.185] diameter flat bottom punch, press the end cap in place. The end cap is properly seated when positioned below the top surface of the plug body.

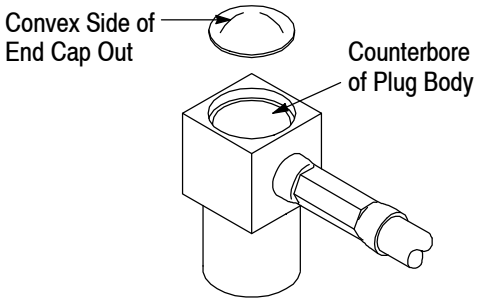


Figure 5

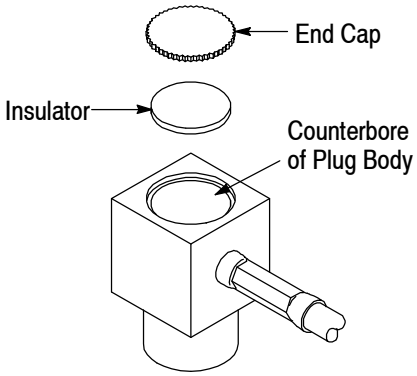


Figure 6

4. REVISION SUMMARY

Since the previous release:

- Updated document to corporate requirements.