

RECOMMENDED Procedure

Sumitomo Electric Lightwave Corp.

Phone: 919-541-8100 Toll Free: 800-358-7378

Web: www.sumitomoelectric.com

Lynx-CustomFit Splice On-Connector (SOC)

Topic	Page
1.0 General	1
2.0 Safety Precautions	1
3.0 Specifications	1
4.0 Components	2
5.0 Required Tools	3
6.0 Procedure for 900um	4-5

1.0 General

This document describes the procedure for installation of the Lynx-CustomFit Splice-On Connector 250µm & 900µm solutions UPC & APC.

2.0 Safety Precautions

- 1. Please read and follow all fusion splicer manufacturers' recommended procedures concerning splicer operation and precautions.
- 2. Safety glasses should be worn when handling bare optical fiber.
- 3. Never look into the end of a microscope or optical cable connected to an optical output device that is operating. Laser radiation is invisible, and direct exposure can severely injure the human eye.
- 4. Alcohol is flammable, causes irritation and is harmful if swallowed or inhaled. Keep alcohol away from heat, sparks, skin, and avoid contact with eyes.

3.0 Specifications

Fiber Type		SMF; MMF 50 & 62.5 μm		
Coating Diameter		250μm, 900μm		
Connector Type		SC		
Polishing	UPC		APC	
Insertion Loss	<0.30 dB		<.30 dB	
Return Loss	> 40) dB	>60 dB	
Color	ВІ	ue	Green	

4.0 SOC Components

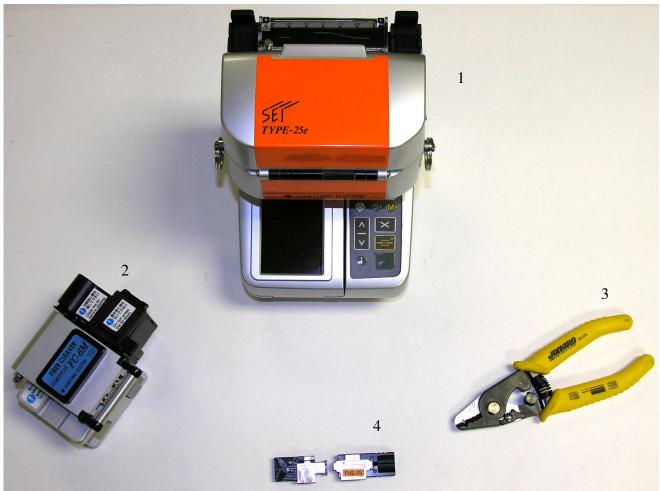
900 Micron Solution

SOC Components



.1	Ferrule Subassembly with Dust Cap
2	Protection Sleeve
3	Inner Housing
4	Outer Housing
5	Strain Relief Boot
6	Rear Housing
7	Spring

5.0 Required Tools



, 1	Fusion Splicer
2	Fiber Optic Cleaver
3	JR-M03 Fiber Optic Strippers
4	Connector Holder & Cordage Holder or Standard 900 micron Holder

6.0 Procedure

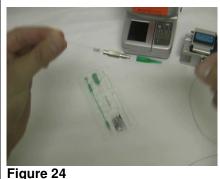






Figure 25

Figure 26

- 1. Open package to expose components.
- 2. Thread 900 micron fiber through strain relief boot, rear housing, spring and slide on fiber protection sleeve (Fig.24)
- 3. Load fiber into holder. (Fig. 25)
- 4. Using JR-M03, strip off 900 micron sheathing and fiber coating then clean fiber using gauze pad moistened with isopropyl alcohol. (Fig. 26)
- 5. Point where 900µm coating stops should be even with edge of fiber holder. (Fig. 26)



Figure 27

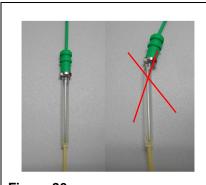


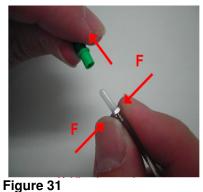
Figure 28



Figure 29

- 6. Cleave fiber using appropriate cleaver and place into fusion splicer. (Fig. 27)
- 7. Load the ferrule assembly into its specially designed holder and place into fusion splicer. (Fig. 27)
- 8. Perform splice.
- 9. After splicing, slide on fiber protection sleeve. Fiber protection sleeve should cover lip on back of ferrule assembly. (Fig. 28)
- 10. Place assembly into heater. Heater should be set to either 60mm or FPS-1 heater condition. (Fig. 29)





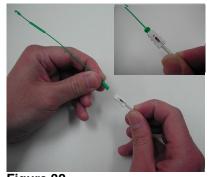
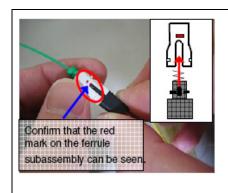


Figure 30

Figure 32

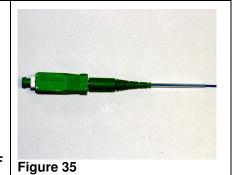
- 11. After completion of heater cycle, wait an additional 60 seconds while assembly cools. If assembly bends redo heater cycle. (Fig. 30)
- 12. Holding the metal screw of the fiber stub, take off the dust cap. Do not pull fiber protection sleeve, this action could break the fiber. (Fig. 31)
- 13. Align keyed sections (marked by red orientation markings) with each other, during APC connector assembly.(Fig. 32)
- 14. Gently press the dust cap onto the ferrule using the dust cap as a temporary holder (Fig. 32)







igure 34



- 15. Align the groove and the inner housing over the rear housing until the components lock together. (Fig. 33)
- 16. Snap the string off dust cap. (Fig. 34)
- 17. Slide outer housing over assembly.
- 18. Complete. (Fig. 35)

6 Issue 2 - 06/19/2008

hone: 919-541-8100 Toll Free: 800-358-7378 Web: www.sumitomoelectric.com