

# Field-Assemble Connector

## FA-SC

Field-assembled SC/UPC fiber optic connector FA-SC does not need polishing, and it is easy to be assembled at the installation site by workers. Unlike regular SC connectors, the FA-SC connector does not need additional tools to assemble. The splicing method of FA-SC is as simple as aligning the V-groove and sliding to Tie-up the fiber. The “Sliding and V-groove tie-up” splicing method is possible to clamp both fiber and coated fiber. The clamping method provides better tensile for it than the field-mountable SC connector and fiber, and also avoid the twisted (tangled) situation. The Loss, Mechanical and Environmental tests on the assembled connectors show excellent results. The finished cables pass qualification tests to ensure the quality of our products subjected to severe mechanical and environmental conditions.

### General Specifications

The design complies with IEC 61754-4(2002-03) Ed.1.2 recommendations, GR-1081 and GR-326 Telcordia standards.

Part No.	FA-SC-SM-F/GT
Fiber type	SM ITU-T G.657A
Insertion loss	Average 0.3dB,
Pre-polished surface	UPC
Return Loss	Minimum 50dB
Coupling method	Push-on coupling
Standard	IEC61754-4
Fiber Retention Force	More than 20N
Applicable cable	3.1x2.0mm
Recycled	Minimum 3 times



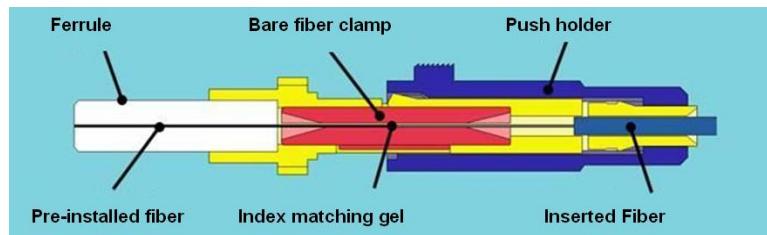
FA-SC connector

### Overview

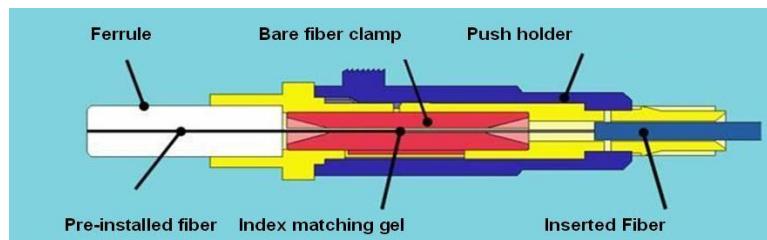
#### Applicable Fiber (all fiber cable complies with G.657A)

- 250um, Single-Mode Fiber
- Applied to approximately 2.0x3.1mm Drop Cable and Indoor Cable
- Applied to coated fiber

#### Assembly Configuration

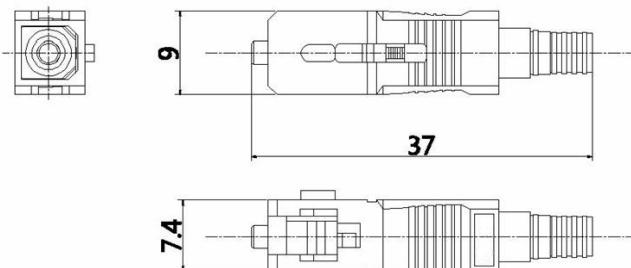


Before assembly configuration



After assembly configuration

## Exterior Drawing



Drawing of FA-SC connector with boot in case of Grip type, total length is 57mm

## Performance Test

### Loss Test

	<b>Wavelength</b>	<b>Mean Loss</b>	<b>Max.</b>
Insertion Loss	1310nm	0.29dB	0.36dB
	1550nm	0.27dB	0.34dB
Return Loss	1310nm	47dB	50.1dB
	1550nm	47dB	51.5dB

Note: Adapter Loss included

## Mechanical Test

	<b>Conditions</b>	<b>Insertion Loss (Change)</b>
Twisted test	13.5N load, +360° to -360° / cycle, 5 cycles in a test	0.05
Tensile test	2kg load, 60sec	0.06
Drop test	Height - 4m	0.03
Connecting and disconnecting test	100 repetition of connecting and disconnecting	0.05
Vibration test	3 axes, 2hr/axis, 1.5mm (peak-peak), 10 to 55Hz (45Hz/min)	0.05

Note: the value of "Change" means that subtraction variation ratio of before experiment I.L and after experiment I.L (adapter loss included)

## Environmental test

	<b>Standards</b>	<b>Condition</b>	<b>Insertion Loss</b>	<b>Return Loss</b>	
			<b>Change</b>	<b>Mean</b>	<b>Min.</b>
Temperature	Telcordia GR-1081-CORE 4.4.2.1	+85°C±2°C for 168hrs	≤ 0.12dB	50.8dB	40.9dB
Humidity	Telcordia GR-1081-CORE 4.4.2.3	90 ~ 95%RH, Temp 75°C for 168hrs	≤ 0.13dB	50.4dB	40.5dB
Temperature cycling	Telcordia GR-1081-CORE 4.4.2.5	-40 ~ 75°C, 21 cycles for 168hrs	≤ 0.17dB	50.1dB	39.1dB

Note: the value of "Change" means that subtraction variation ratio of before experiment I.L and after experiment I.L (adapter loss included)

## Order Information

**Part Number:** FA-SC-SM-F/GT