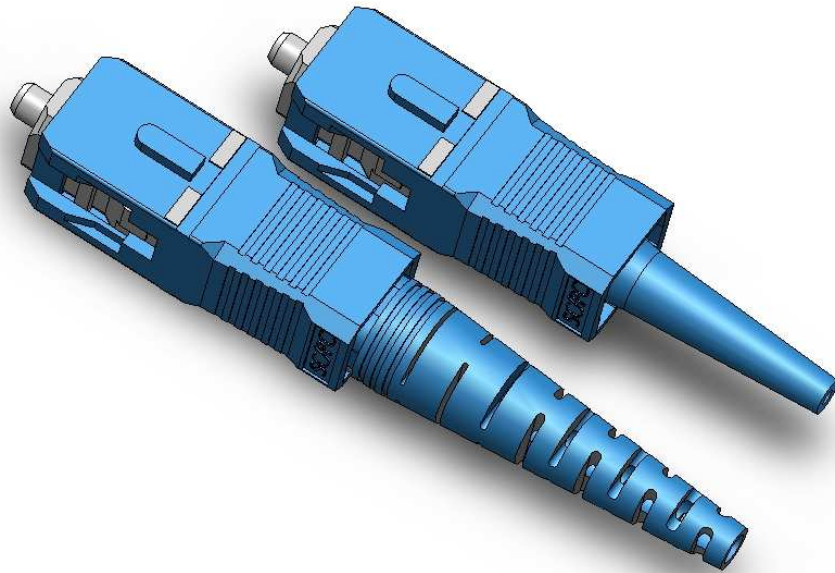


SC Connector Specification

January 10, 2011



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Y-connect Operations
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Tel: 717-944-7144
<http://www.y-connect.com>

Description

Y-connect SC/PC connector is available in both single-mode and multimode versions, and is fully compatible with Telcordia. Both single-mode and multimode versions come with a zirconia ceramic ferrule with pre-polished PC profile and convex spherical end. This allows for fast polishing of the fiber and enables the installer to achieve low optical loss, while ensuring maximum repeatability.

Y-connect SC/APC connectors come with a zirconia ceramic ferrule with choice of endface types including standard, step, and conic. These endface types allow for faster polishing, and lower insertion loss and back reflection*, while ensuring maximum repeatability.

Application

- Telecommunication
- CATV
- LAN & WAN
- Network
- Broadband
- FTTP.

Features

PC Type

- Precision mechanical dimension
- Single-crimp design with pre-domed ceramic ferrule is designed for fast, easy assembly & polishing
- Meets Telcordia specifications
- Low insertion loss
- Ultra low back reflection
- Corrosion resistant body, All plastic components are UL 94 V-0
- For 3.0mm, 2.0mm, 1.6 mm jacket or 900µm buffer.
- Rubber Boot and Telcordia Boot can be selected.
- Meet IEC 61754-4

APC Type

- Free-floating APC ceramic ferrule
- Compatible with APC hardware
- Connector Kits is also available
- Meet IEC 61754-4

Parameter

Item	Parameter		
	Single-Mode	APC	Multi-Mode
Insertion Loss	≤0.3dB		
Durability (1000 Mating)	0.2dB Max.		
Operating Temperature	-40°C~+75°C		
Storage Temperature	-40°C~+85°C		

Appearance, Dimensions and Part Numbering



Figure 1. SC 2.0mm and 3.0mm “S-Type” Connector

Description		SC Connector, “S” Type, 2 mm and 3 mm		
P/N		OG1SS1- <u>a</u> 1 <u>bc</u> 1	2 mm	Simplex
		OG1SS1- <u>a</u> 3 <u>bc</u> 1	3 mm	Simplex
		OG1SD1- <u>a</u> 1 <u>bc</u> 1	2 mm	Duplex
		OG1SD1- <u>a</u> 3 <u>bc</u> 1	3 mm	Duplex
		a Ferrule Hole Diameter and Type b Plug Frame Color c Boot Color		
Item	Description	Qty		Material
		SX	DX	
1	Dust Cap	1	2	Plastic
2	Plug Frame	1	2	Plastic
3	Plug Assembly	1	2	Combination
4	Crimp Eyelet	1	2	Metal
5	Spacer	1	2	Metal
6	Boot	1	2	Plastic
7	Clip	0	1	Plastic

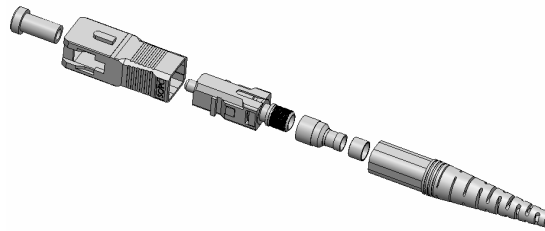


Figure 2. SC 2.0mm and 3.0mm “R-Type” Connector

Description		SC Connector, “R” Type, 2 mm and 3 mm		
P/N		OG1SS3-a1bc1	2 mm	Simplex
		OG1SS3-a3bc1	3 mm	Simplex
		OG1SD3-a1bc1	2 mm	Duplex
		OG1SD3-a3bc1	3 mm	Duplex
		a Ferrule Hole Diameter and Type b Plug Frame Color c Boot Color		
Item	Description	Qty		Material
		SX	DX	
1	Dust Cap	1	2	Plastic
2	Plug Frame	1	2	Plastic
3	Plug Assembly	1	2	Combination
4	Crimp Sleeve	1	2	Metal
5	Crimp Ring	1	2	Metal
6	Boot	1	2	Plastic
7	Clip	0	1	Plastic

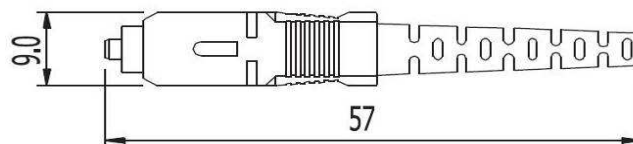


Figure 3. SC 2.0/ 3.0 mm Telcordia Style Boot

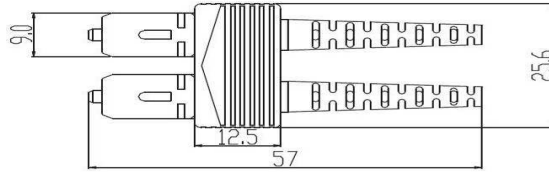


Figure 4. SC Duplex connector

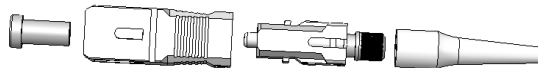


Figure 5. SC 0.9mm connector

Description		SC Connector, 0.9 mm	
P/N		OG1SS1- <u>a</u> 4 <u>b</u> c <u>1</u>	
		a Ferrule Hole Diameter and Type b Plug Frame Color c Boot Color	
Item	Description	Qty	Material
1	Dust Cap	1	Plastic
2	Plug Frame	1	Plastic
3	Plug Assembly	1	Combination
4	Boot	1	Plastic

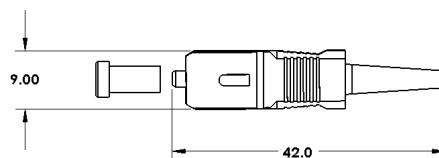


Figure 6. SC 0.9mm Rubber Boot

**Hole Size (μm) (a)**

	Application	Ferrule Polish Type	Singlemode or Multimode
B = 125.0 -0,+1	high performance	PC	SM
A = 125.5 -0,+1	standard	PC	
E = 127.0 -0,+5	standard	PC	MM
F = 125.0 -0,+1	high performance	APC STEPPED	SM
G = 125.5 -0,+1	standard	APC STEPPED	
I = 125.0 -0,+1	high performance	APC CONICAL	
J = 125.5 -0,+1	standard	APC CONICAL	

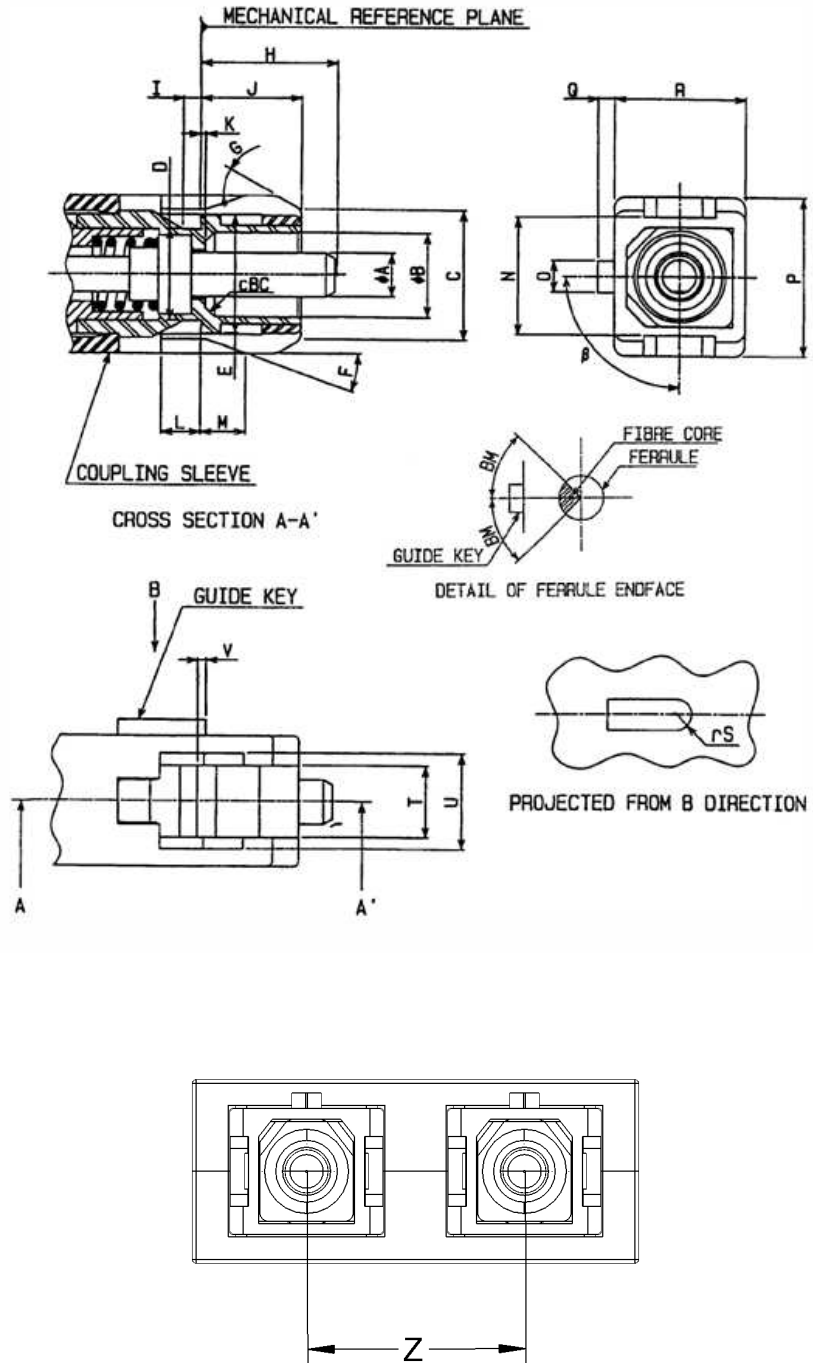
Plug Frame Color* (b)

B = Blue (SM)
G = Green (APC)
E = Beige (MM)

Boot (c)

B = Blue (SM)
G = Green (APC)
W = White (MM)

*In duplex connectors, duplex clip is same color as connector housing

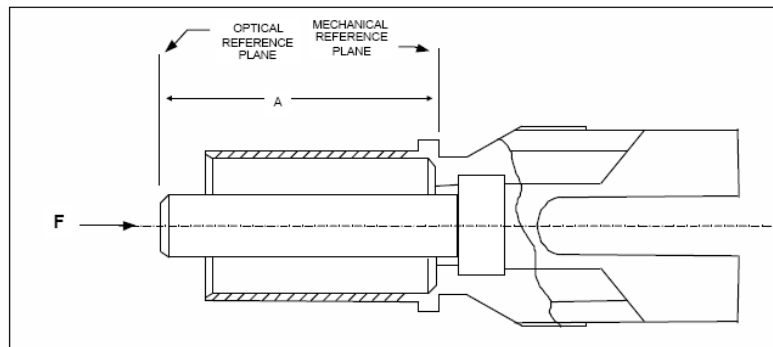




Ref.	Dimensions (mm.)		Notes
	Min.	Max.	
A	2.4985	2.4995	
B	4.8	4.9	
C	6.8	7.4	
D	-	5.3	
E	6.7	6.8	
F	19°	23°	
G	25°	35°	
H	7.15	7.85	1, 2
I	0.8	1.2	
J	5.3	5.5	
K	-	0.05	3
L	2.11	-	4
M	2.0	2.8	4
N	6.6	6.8	
O	1.6	1.8	
P	8.79	8.99	
Q	0.8	1.0	
R	7.19	7.39	
S	-	0.9	Radius
T	4.05	4.15	
U	5.4	-	
V	-0.5	0.57	3
BC	0	0.5	Chamfer
Z	12.7		5

Notes:

1. Ferrule compression force shall be from 7.8 N to 11.8 N, when the ferrule is compressed to a point where H is 7.00 ± 0.1 mm.
2. This value shows the dimension after the ferrule is polished and in the unmated condition.
3. The negative dimension refers to the position of the inside bottom plane left – direction relative to the mechanical reference plane
4. The coupling sleeve can move in both the right and left directions to engage the adapter. Dimension M is measured when the coupling sleeve is in its extreme right position.
5. Each of the units in the duplex connector shall comply with all of the dimensions in Figure 1.5a.
6. Where a tolerance of form is not specified, the limits of the dimensions for a feature control the form as well as the size.
7. Where interrelated features of size (features shown with a common axis or center plane) have no geometric tolerance of location or run out specified, the limits of the dimensions for a feature control the location tolerance as well as the size.
8. Where perpendicular features (features shown at right angles) have no geometric tolerance of orientation or run out specified, the limits of the dimensions for a control the orientation tolerance as well as the size.



Requirements for ferrule travel and contact force:

	IF	THEN
1	A \geq 7.15 mm	F = 0
2	A \cong 7.1 mm	F \geq 7.8 N (800 gf)
3	A \cong 6.9 mm	F \cong 11.8 N (1200 gf)

Note: Dimension A is fore finished ends after all polishing has been completed