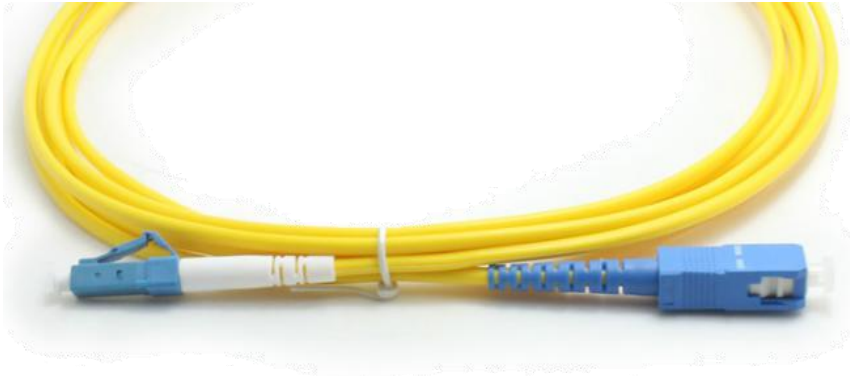




SC-SC Fiber Optic Patch Cord Specification



Application:

- 1.Optical fiber communication systems engineering
- 2.Fiber optic data communication network
- 3.Fiber CATV engineering
- 4.Other optical technology tests

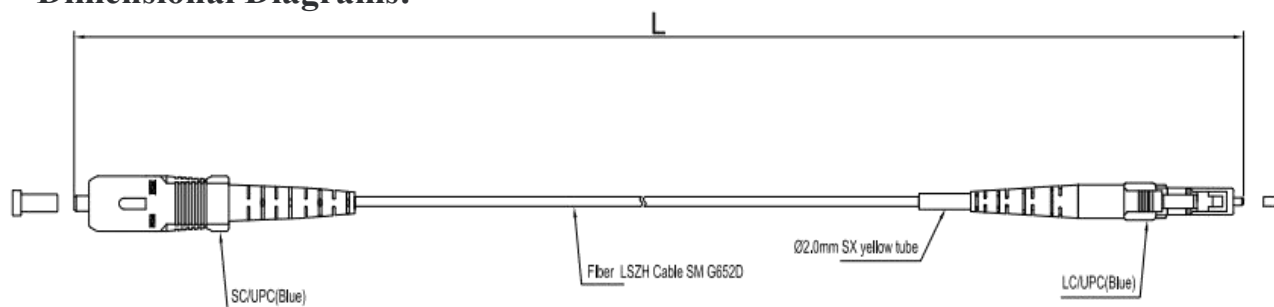
Features:

- 1.The style is diverse, the interface is complete
- 2.Low insertion loss and added loss
- 3.Height of attenuation
- 4.High back loss, small volume, light weight
- 5.End-face geometry and quality superior than IEC and Telcordia standards.
- 6.G652D or G657A,LSZH, cable jacket.
- 7.Mechanical performance: IEC 61754-4 standard.
- 8.RoHS and REACH materials compliant.

Connector Types:

Type	Reference	Note	
SC	IEC 61754-4	Single mode simplex	UPC: Blue connectors, Blue boots
LC	IEC 61754-20	Single mode simplex	UPC: Blue connectors , White boots

Dimensional Diagrams:



End 1

End 2

Patch cord versions:

Jumper tolerance requirement	
Overall length (L) (M)	length of tolerance (CM)
$0 < L \leq 20$	+10/0

Optical Characteristics:

End 1

	Item	Reference
Insertion loss	Typical value $\leq 0.15\text{dB}$; Maximum ≤ 0.30	IEC 61300-3-34
Return loss	$\geq 50\text{dB}$ (UPC)	IEC 61300-3-6

End 2

	Item	Reference
Insertion loss	Typical value $\leq 0.15\text{dB}$; Maximum ≤ 0.30	IEC 61300-3-34
Return loss	$\geq 50\text{dB}$ (UPC)	IEC 61300-3-6

End-Face Geometry:

	End 1	End 2
Item	UPC (Ref: IEC 61755-3-1)	UPC (Ref: IEC 61755-3-1)
Radius of curvature (mm)	10 to 25	7 to 25
Fiber height (nm)	-100 to 100	-100 to 100
Apex offset (μm)	0 to 50	0 to 50
APC angle ($^\circ$)	/	/
Key error ($^\circ$)	/	/

End-Face Quality (SM):

End 1

Zone	Range (µm)	Scratches	Defects	Reference
A: Core	0 to 25	None	None	IEC 61300-3-35:2015
B: Cladding	25 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	

End 2

Zone	Range (µm)	Scratches	Defects	Reference
A: Core	0 to 25	None	None	IEC 61300-3-35:2015
B: Cladding	25 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	

Mechanical Characteristics:

Test	Conditions	Reference
Endurance	500 matings	IEC 61300-2-2
Vibration	Frequency: 10 to 55Hz, Amplitude: 0.75mm	IEC 61300-2-1
Cable retention	100N	IEC 61300-2-4
Strength of coupling mechanism	80N for 2 to 3mm cable	IEC 61300-2-6
Cable torsion	15N for 2 to 3mm cable	IEC 61300-2-5
Fall	10 drops, 1m drop height	IEC 61300-2-12
Static lateral load	1N for 1h	IEC 61300-2-42
Cold	-25°C, 96h duration	IEC 61300-2-17
Dry heat	+70°C, 96h duration	IEC 61300-2-18
Change of temperature	-25°C to +70°C, 12 cycles	IEC 61300-2-22
Humidity	+40°C at 93%, 96h duration	IEC 61300-2-19