

### Shenzhen UnitekFiber Solution Limited

## Breakout Fiber Patch cords LC SC APC 8 Cores SM Bend Insensitive Fiber G652D G657A1 LSZH Black

#### **LC-LC Cable**

LC-LC Cable Fiber Optic Patch cord means that the terminations are connect at both ends of the optical cable to realize the optical path active connection. Optical Fiber Patch cord is similar to coaxial cable except that there is no mesh shield. The light-transmitting glass core is in the central. The fiber core has a diameter of 50/125μm to 65/125μm for multi mode fiber patch cords, which is roughly equivalent to the thickness of a human hair. The diameter for single mode fiber core is 8μm to 10μm. The fiber core is wrapped by a glass which is having a lower index of refraction than the core to maintain the fiber within the core



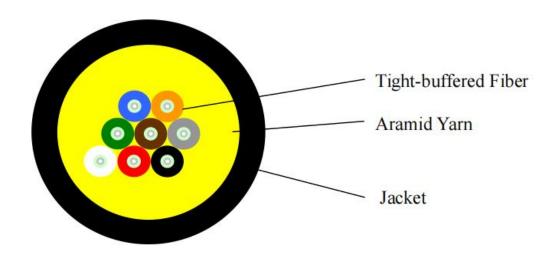


# UnitekFiber Shenzhen UnitekFiber Solution Limited

### **Connector Technical Parameter**

	Model	SM
Connector A: LC		
Insertion Loss	Standard	≤0.3dB
Return Loss		UPC≥50dB
Durability(500 Matings)		≤0.2dB
Test Wavelength		1310nm&1550nm
Connector B: LC		
Insertion Loss	Standard	≤0.3dB
Return Loss		UPC≥50dB
Durability(500 Matings)		≤0.2dB
Test Wavelength		1310nm&1550nm

### **Cable Structure Diagram**





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### **Cable Dimensions and Constructions**

Items		Descriptions
Tight-buffered Fiber	Dimension	850±50μm
	Fiber Count	8
	Material	PVC
	Color	Blue, Orange, Green, Brown,
		Gray, White, Red, Black,
Strength Member	Material	Aramid Yarn
	Material	LSZH-UV
Sheath	Color	Orange
	Diameter	5.5mm

### **Mechanical and Environmental Characteristics**

Items	Descriptions	
	short-term	300N
Tensile	long-term	1500N
0.1	short-term	1000 N/10cm
Crush	long-term	300 N/10cm
Min.Bend Radius (Dynamic)	mm	20D
Min.Bend Radius (Static)	mm	10D
Operating Temperature	- 2 0 C-+ 6 0 C	
Temperature Range	-2 0 C-+ 6 0 C	

### The properties of single mode optical fiber (ITU-T Rec. G652D)

Item	Specification
Fiber type	Single mode
Fiber material	Doped silica
Attenuation coefficient  @ 1310 nm  @ 1383 nm	≤ 0.36 dB/km ≤ 0.32 dB/km



Shenzhen UnitekFiber Solution Limited  @ 1550 nm ≤ 0.22 dB/km		
@ 1550 nm @ 1625 nm	$\leq 0.22 \text{ dB/km}$ $\leq 0.30 \text{ dB/km}$	
Point discontinuity	≤ 0.05 dB	
Cable cut-off wavelength	≤ 1260 nm	
Zero-dispersion wavelength	1300 ~ 1324 nm	
Zero-dispersion slope	$\leq 0.092 \text{ ps/(nm}^2.\text{km})$	
Chromatic dispersion  @ 1288 ~ 1339 nm  @ 1271 ~ 1360 nm  @ 1550 nm  @ 1625 nm	≤3.5 ps/(nm. km) ≤5.3 ps/(nm. km) ≤18 ps/(nm. km) ≤22 ps/(nm. km)	
PMD <sub>Q</sub> (Quadrature average*)	≤0.2 ps/km <sup>1/2</sup>	
Mode field diameter @ 1310 nm	9.2±0.4 um	
Core / Clad concentricity error	≤ 0.5 um	
Cladding diameter	$125.0 \pm 0.7 \text{ um}$	
Cladding non-circularity	≤1.0%	
Primary coating diameter	245 ± 10 um	
Proof test level	100 kpsi (=0.69 Gpa), 1%	