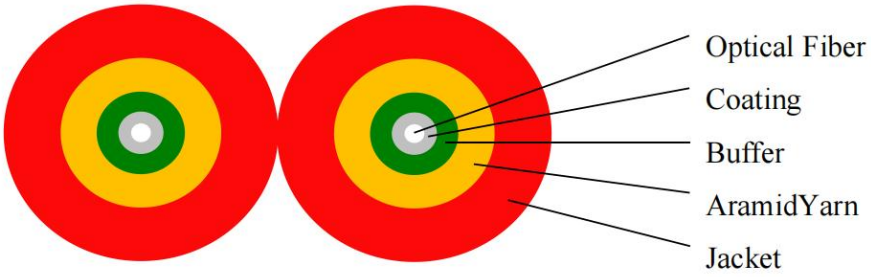
Fiber Optic Patchcord|LC-FC Fiber Patchlead Multimode OM2 50/125μm Duplex 3.0mm PVC Orange

Unitek Fiber provide patch cord. 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 9/125um 50/125μm and 65/125 μm for SM and multi mode fiber path cord, 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.

Drawings:

Model		MM
Connector A : LC		
Insertion Loss	Standard	≤0.30dB
Return Loss		PC≥35dB
Durability(500 Matings)		≤0.2dB
Test Wavelength		850nm& 1300nm
Connector B: FC		
Insertion Loss	Standard	≤0.30dB
Return Loss		PC≥35dB
Durability(500 Matings)		≤0.2dB
Test Wavelength		850nm& 1300nm

Cable Structure Diagram



Cable Dimensions and Constructions

Items		Descriptions
Optical Fiber	Fiber count	2
	Color	Optical Fiber Chromatography

	Diameter	850±50μm
Strength Member	Material	Aramid yarn
Sheath	Material	PVC
	Color	Orange
	Diameter	4.0±0.1mm

Mechanical and Environmental Characteristics

Items	Descriptions	
Tensile strength	short-term	200N
	long-term	100N
Crush Resistance	short-term	1000N/100mm
	long-term	200N/100mm
Min.BendRadius（Dynamic）	mm	50
Min.BendRadius（Static）	mm	30
OperatingTemperature	- 2 0 C-+ 60 C	
Temperature Range	- 2 0 C-+ 6 0 C	

The properties of multimode optical fiber (ITU-T Rec. OM2)

Characteristic	Condition	Data	Unit
Optical properties			
Attenuation	850nm 1300nm	≤2.3 ≤0.6	dB/km dB/km
Full injection bandwidth	850nm 1300nm	≥500 ≥500	MHz•Km MHz•Km
Numerical aperture		0.200±0.015	
Zero dispersion wavelength		1295-1340	nm
A zero-dispersion slope	1295-1310 1310-1340	≤0.105 ≤0.000375	ps/(nm2.km) ps/(nm2.km)
Group refractive index	850nm 1300nm	1.482 1.477	
The macro bend additional attenuation 100 CircleΦ75mm 4 CircleΦ30mm	850nm 1300nm 850nm 1300nm	≤0.5 ≤0.5 ≤1.0 ≤1.0	dB dB dB dB
Geometric characteristics			
Core diameter		50±2.5	μm
Core roundness		≤5.0	
Cladding roundness		≤1.0	%

Cladding diameter		125.0±1.0	μm
Coating diameter		245±7	μm
Coating / package concentricity error		≤10.0	μm
Coating roundness		≤6.0	%
Core / package concentricity error		≤1.5	μm
Fiber length		≤17.6	Km/axis
Backscatter characteristics(1300nm)			
Steps(Mean value of two-way measurement)		≤0.1	dB
The irregularity of the length direction and the discontinuity of the point		≤0.1	dB
Attenuation inhomogeneity		≤0.08	dB/km
Environmental characteristics（850nm、1300nm）			
Temperature additional attenuation	-60℃ ～+85℃	≤0.1	dB/km
Temperature-humidity cycle additional attenuation	-10 ℃ ～ +85 ℃， 4%~98% Relative humidity	≤0.1	dB/km
Flooding additional attenuation	23℃，30 days	≤0.1	dB/km
Dry heat additional attenuation	85℃，30 days	≤0.1	dB/km
Hot and humid additional attenuation	85 ℃ and 85% Relative humidity，30 days	≤0.1	dB/km
Mechanical properties			
Screening tension		≥9.0 ≥1.0 ≥100	N % kpsi
Coating peeling force	Typical average Peak value	1.5 ≥1.3 ≤8.9	N N
Dynamic fatigue parameters(Nd,Typical value)		27	