SC to SC FIBER OPTIC PATCH CORD

UFP966D3X-XX
UFP966D2X-XX

UFP566D3X-XX
UFP566D2X-XX

UFP466D3X-XX
UFP466D2X-XX

UFP366D3X-XX
UFP366D2X-XX

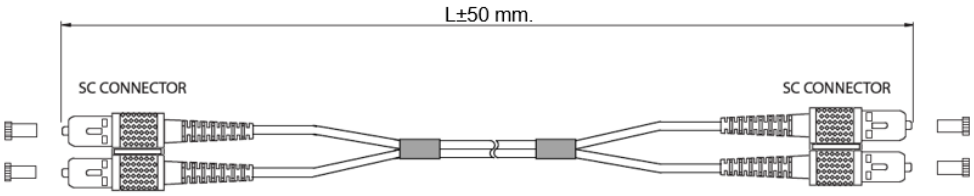
UFP266D3X-XX
UFP266D2X-XX

Scope of Application

This specification covers the general requirements for fiber optic patch cord, The cables are high grade duplex and simplex cable available FR-LSZH. The patch cords are low insertion loss and high return loss. Good in repeatability and exchangeability. The patch cord shall be factory assembled with high quality control and 100% test Provide label for easily to identify. The patch cord shall be available length in 3, 5, and 10 meters or other.

LINK fiber optic patch cord support application such as 25/40/50/100/200/400Gbps Ethernet, IEEE802.3ae 10G Ethernet, IEEE802.3z Gigabit Ethernet, IEEE802.3u Fast Ethernet, 52/155/622Mbps, 1.2Gbps ATM, FDDI, Fiber channel, FTTx, CATV, CCTV and others.

Drawing



Technical Standard

- ANSI/TIA-568.3-E
- ANSI/TIA-568.3-D
- ANSI/ICEA 596
- FOTP EIA/TIA-455
- ITU-T G.652D, G.657A1 (Singlemode)
- ITU-T G.651 (Multimode)
- GR 326 CORE (Singlemode)
- UL, FR-LSZH, OFNR
- ISO/IEC 11801:2017
- ISO/IEC 11801:2011 (Ed.2.2)
- IEC 60793, IEC 60794, IEC 60332-1-2
- IEC 61300-2, IEC 61300-3
- IEC 61034-2, IEC 60754-2
- TIA/EIA-604, FOCIS 3
- RoHS Compliant, EN 50173-1

OPTICAL FIBER

Items		Specifications
Fiber Type		9/125 μm(OS2)
Max. / Typ. Attenuation	1310 nm	≤ 0.35/0.33 dB/km
	1383 nm	≤ 0.35/0.31 dB/km
	1550 nm	≤ 0.21/0.19 dB/km
	1625 nm	≤ 0.23/0.20 dB/km
Core	Mode Field Diameter	9.2±0.4 μm@ 1310 nm 10.4±0.5 μm@ 1550 nm
Cladding Diameter		125 ± 0.7μm
Coating Diameter, Primary		242 ± 5 μm
Coating Diameter, Secondary		250 ± 5 μm
Cladding Non-circularity		≤ 0.7 %
Core/Cladding Concentricity error		≤ 0.5 μm
Coating/Cladding Concentricity error		≤ 12 μm
Attenuation (Homogeneity)		Max 0.1 dB/km
Zero Dispersion Wavelength		1300 ~ 1324 nm
Zero Dispersion Slope		≤ 0.092 ps/(nm^2.km)
Cut-off Wavelength	λ o (Fiber)	1150 ~ 1330 nm
	λ ∞ (Cable)	≤1260nm
Proof Test Stress		100 Kpsi
Chromatic Dispersion	λ ; 1285~1340 nm	≤ 3.5 ps/nm.km
	λ = 1550 nm	≤ 18 ps/nm.km
	λ = 1625 nm	≤ 22 ps/nm.km
Polarization mode dispersion (PMD)		≤ 0.20 ps/√km
Fiber Curl		≥ 4M
Numerical Aperture		0.130 ± 0.010
Group refractive index	1310 nm	1.4676
	1550 nm	1.4682

Table 1 The Optical, Geometrical Performance of the Singlemode Fiber (The specification conforms to the requirement of ISO/IEC11801, ANSI/TIA-568.3-E, IEC 60793-2B1.3, ITU-T G.652D)

OPTICAL FIBER

Items		Specifications			
Fiber Type		50/125 µm (OM2)	50/125 µm (OM3)	50/125 µm (OM4)	50/125 µm (OM5)
Max./ Typ. Attenuation (dB/km)	850 nm	≤ 2.7 / ≤ 2.5	≤ 2.7 / ≤ 2.3	≤ 2.7 / ≤ 2.3	≤ 2.7 / ≤ 2.3
	1300 nm	≤ 0.8 / ≤0.7	≤ 0.8 / ≤ 0.6	≤ 0.8 / ≤ 0.6	≤ 0.8 / ≤ 0.6
	953 nm	N.A	N.A	N.A	≤ 2.3 / ≤ 2.0
Bandwidth (MHz/km)	850 nm	≥ 500	≥ 1500	≥ 3500	≥ 3500
	1300 nm	≥ 500	≥ 500	≥ 500	≥ 500
	953 nm	N.A	N.A	N.A	≥ 1850
850nm Laser Bandwidth (MHz/km)		N.A	≥ 2000	≥ 4700	≥ 4700
953nm Laser Bandwidth (MHz/km)		N.A	N.A	N.A	≥ 2470
Core Diameter (µm)		50.0 ± 2.5	50.0 ± 2.5	50.0 ± 2.5	50.0 ± 2.5
Cladding Diameter (µm)		125 ± 1	125 ± 1	125 ± 1	125 ± 1
Core Non-circularity (%)		≤ 5	≤ 5	≤ 5	≤ 5
Cladding Non-circularity (%)		≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0
Core/Cladding Concentricity error (µm)		≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5
Coating Diameter, Primary (µm)		242 ± 5	242 ± 5	242 ± 5	242 ± 5
Coating Diameter, Secondary (µm)		250 ± 5	250 ± 5	250 ± 5	250 ± 5
Coating Non-Circularity (%)		≤5	≤5	≤5	≤5
Coating/Cladding Concentricity error (µm)		≤12	≤12	≤12	≤12
Attenuation (Homogeneity)		Max 0.1 dB/km	Max 0.1 dB/km	Max 0.1 dB/km	Max 0.1 dB/km
Proof Test Stress (kpsi)		100	100	100	100
Bending Loss @ 850 & 1300 nm (100 turns,		≤ 0.5 dB	≤ 0.5 dB	≤ 0.5 dB	≤ 0.5 dB
Zero-Dispersion Wavelength		1295~1315nm	1295~1315nm	1295~1315nm	1295~1315nm
Zero-Dispersion Slope (ps/(nm^2.km))		≤ 0.101	≤ 0.101	≤ 0.101	≤ 0.101
Numerical Aperture		0.200 ± 0.015	0.200 ± 0.015	0.200 ± 0.015	0.200 ± 0.015
Group refractive index	850 nm	1.482	1.482	1.482	1.482
	1300 nm	1.477	1.477	1.477	1.477

Table 2 The optical, Geometrical Performance of the Multimode Fiber (The specification conforms to the requirement of ISO/IEC11801, ANSI/TIA-568.3-E, IEC 60793-2A1a, IEC 60793-2A1b, ITU -T G.651)

PATCH CORD CONSTRUCTIONS AND MECHANICAL

The construction of the cable shall be in accordance with Table 3 below.

Items	Specifications
Ferrule	Zirconia ceramic, Pre-radiused
Boot	Thermoplastic, UL 94V-0
SC Housing	PBT, Thermoplastic, UL 94V-0
Additional Strength Member	Aramid Yarns
Jacket	FR-LSZH and OFNR (UL-1666)
Cable Diameter (Approx.)	2.0 mm. and 3.0 mm.
Pulling Force	200 N
Minimum Bending Radius	30 mm.

Table 3 Construction and Mechanical of fiber optic patch cord.

PERFORMANCE

Items		SINGLEMODE (OS2)	MULTIMODE (OM2, OM3, OM4, OM5)
Insertion Loss	Typ.	≤ 0.15 dB	≤ 0.15 dB
	Max.	≤ 0.30 dB	≤ 0.30 dB
Return Loss	UPC	≥ 50 dB	≥ 26 dB
	APC	≥ 60 dB	-
Durability/Mating Cycle		≥ 500 Cycle	≥ 500 Cycle

TEMPERATURE RANGE

For the cables covered by this specification, the following temperature ranges apply.

- Operation Temperature : -40°C to +85°C
- Storage/Shipping Temperature : -40°C to +85°C

ORDER INFORMATION

SC to SC FIBER OPTIC PATCH CORD, DUPLEX, FR-LSZH AND OFNR

Descriptions	Part Number				
	9/125 µm (OS2)	50/125 µm (OM2)	50/125 µm (OM3)	50/125 µm (OM4)	50/125 µm (OM5)
SC to SC Patch Cord, Duplex, 3.0mm	UFP966D3X-XX	UFP566D3X-XX	UFP466D3X-XX	UFP366D3X-XX	UFP266D3X-XX
SC to SC Patch Cord, Duplex, 2.0mm	UFP966D2X-XX	UFP566D2X-XX	UFP466D2X-XX	UFP366D2X-XX	UFP266D2X-XX

X = Polish Contact, 0 : PC-PC, 1 : UPC-UPC, 2 : APC-APC, 6 : UPC-APC, 8 : APC-UPC

XX = Length, 03 : 3 meters, 05 : 5 meters, or available on request.

Specifications subject to change without notice.