CLEERLINE XD PATCH CORDS
For Premise / Data Environments

Cleerline XD fiber optic patch cords deliver extreme performance and reliability for all system connections. XD series patch cords incorporate Cleerline's exclusive SSF™ integral polymer as part of the fiber optic glass technology.

SSF™ fibers provide up to 10,000x increased bend and up to 200x increased pull strength compared to standard glass fibers. SSF™ fibers are extremely durable and are able to endure even repeated tight bending with insensitivity to optical loss at all wavelengths even at very low radii. High quality connectors ensure insertion loss and back reflections that exceed all industry standards.

Cleerline SSF™ Fiber

Cleerline SSF™ Fiber is a specialty fiber providing protection for bend longevity and superior mechanical strength compared to typical glass fibers. Designed for reliability in all applications providing flexible interconnection to active equipment, passive optical devices and cross-connects. These XD series patch cords exhibit much lower optical power loss under bend conditions while remaining compatible with all conventional cabling.

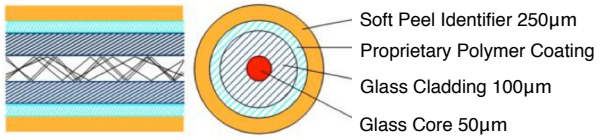
Applications

- Data Centers
- Telecommunications networks
- High Bandwidth networks
- FTTx

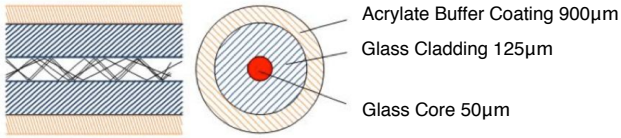
Features & Benefits

- Conforms to IEC, EIA-TIA and Telecordia performance requirements
- Available in Duplex Configurations with clips
- Standard LC and SC connector types
- Bend Insensitive OM2, OM3, OM4, and OS2 type fibers
- TIA color coded connectors
- 600um tight buffer
- Riser Rated (OFNR) jacket type
- RoHS compliant

Cleerline SSF™ 50/125 Multimode Fiber

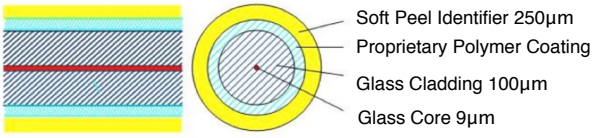


Standard 50/125 Multimode Fiber

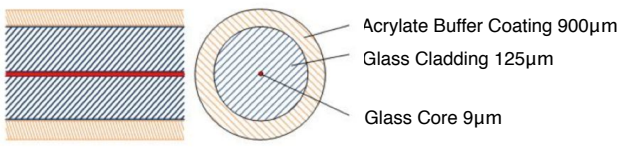


Cleerline SSF™ Multimode fibers have the same 50µm core as a typical 50/125 multimode fiber. SSF™ fibers incorporate a polymeric coating as part of the glass claddings overall diameter. Core + Cladding + Hybrid proprietary coating equals 125µm, the same as typical glass fibers. SSF™ fibers also incorporate Cleerline's "soft peel" 250µm acrylate coating for color identification and ease of removal without the use of fiber strippers.

Cleerline SSF™ 9/125 Single Mode Fiber



Standard 9/125 Single Mode Fiber



Cleerline SSF™ Singlemode fibers have the same 9µm core as a typical 9/125 Singlemode fiber. SSF™ fibers incorporate a polymeric coating as part of the glass claddings overall diameter. Core + Cladding + Hybrid proprietary coating equals 125µm, the same as typical glass fibers. SSF™ fibers also incorporate Cleerline's "soft peel" 250µm acrylate coating for color identification and ease of removal without the use of fiber strippers.

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Cleerline SSF™ 50/125µm Specialty Optical Fiber Characteristics
Conditions Specified Values Unit

PHYSICAL CHARACTERISTICS – MULTIMODE

Core Diameter 50.0 ± 2.5 (µm)
Core Non- circularity ≦ 5 (%)
Core / Hybrid Cladding Concentricity Error ≦ 3.0 (µm)
Hybrid Cladding Diameter 125 ± 1 (µm)
Hybrid Cladding Non-Circularity ≦ 3.0 (%)
Protective Coating Concentricity Error ≦ 3.0 (µm)
Soft-Peel Jacket Identifier 245 ± 5
Coating Strip Force (typicial) ≦ 100 (g)
Color Coating Diameter 250 ± 10 (µm)
Fiber Curl ≧ 2 (m)
Proof Test 100 (Kps)
Bend Induced Attenuation at 1300 nm ≦ 1.0 (dB)

SSF™ conforms to the requirement of IEC 60793-2-10 A1a.3, ISO/IEC 11801 & ITU-T G.651.1. 850 nm Laser-Optomized 50 µm core multimode fiber for 10 Gb/s & above applications

PHYSICAL CHARACTERISTICS – SINGLEMODE

Mode Field Diameter at Wavelength 1310nm	8.6 ± 0.4 (µm)
Mode Field Diameter at Wavelength 1550nm	9.7 ± 0.5 (µm)
Core / Hybrid Cladding Concentricity Error	≦ 0.5 (µm)
Hybrid Cladding Diameter	125 ± 0.7 (µm)
Hybrid Cladding Non-Circularity Error	≦ 1.0 (%)
Soft Peel Jacket Identifier Diameter	250 ± 0.7 (µm)
Coating Strip Force	≦100 (g)
Fiber Curl	≧2 (m)
Proof Test	100 (kpsi)
Bend Induced Attenuation	
1550nm 1 turn 10mm radius	≦ 0.3 (dB)
10 turns around a mandrel of 15 mm radius	≦ 0.03 (dB)
1625nm 1 turn 10mm radius	≦ 1.0 (dB)

SSF™ complies or exceeds the ITU-T recommendations G.657 A2, G657 B2 and G.652 D, the IEC International Standard 60793-2-50 type B.1.3 and B.6.A&B Optical Fiber Specification.

OPTICAL CHARACTERISTICS – OM2

Attenuation Coefficient	850 nm	≦ 3.0 (dB/km)
	1300 nm	≦ 1.0 (dB/km)
Numerical Aperture		0.200 ± 0.015
Overfilled Modal Bandwidth	850 nm	≧ 700 (MHz·km)
	1300 nm	≧ 500 (MHz·km)
High Performance EMB*	850nm	≧ 950 (MHz·km)

OPTICAL CHARACTERISTICS – OM3

Attenuation Coefficient	850 nm	≦ 3.0 (dB/km)
	1300 nm	≦ 1.0 (dB/km)
Numerical Aperture		0.200 ± 0.015
Overfilled Modal Bandwidth	850 nm	≧ 1500 (MHz·km)
	1300 nm	≧ 500 (MHz·km)
High Performance EMB	850nm	≧ 2000 (MHz·km)

OPTICAL CHARACTERISTICS – OM4

Attenuation Coefficient	850 nm	≦ 3.0 (dB/km)
	1300 nm	≦ 1.0 (dB/km)
Numerical Aperture		0.200 ± 0.015
Overfilled Modal Bandwidth	850 nm	≧ 3500 (MHz·km)
	1300 nm	≧ 500 (MHz·km)
High Performance EMB	850nm	≧ 4700 (MHz·km)

OPTICAL CHARACTERISTICS – OS2

Attenuation Coefficient	1310 nm	≦ 0.35 (dB/km)
	1550 nm	≦ 0.21 (dB/km)
Mode Field Diameter	1310 nm	8.6± 0.4um
	1550 nm	9.7± 0.5um
Cable Cut-off Wavelength		≦1260nm
Zero Dispersion Wavelength		1310nm-132$_{4n}$m

MODEL NUMBER CONFIGURATOR – XD SERIES PATCH CORDS – 1.6mm Duplex Type

EXAMPLE: Part # DOM3LCSC03m = Duplex, Multimode OM3, LC to SC, 3 meter patch cord

Duplex	Fiber Type	Connector Type	Length	Polish (Singlemode Only)
D	XXX	XXXX	XXX	-XX
D	OM2 = Multimode OM2 (Orange)	LCLC = LC to LC	01m	-UPC
D	OM3 = Multimode OM3 (Aqua)	LCSC = LC to SC	02m	-APC
D	OM4 = Multimode OM4 (Violet)	SCSC = SC to SC	03m	
D	OS2 = Singlemode OS2 (Yellow)		05m	
			10m	

For other lengths and configurations please contact Cleerline @ 866.469.2487

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