

Cleerline SSF<sup>TM</sup> Duplex cable is composed of two strands of SSF<sup>TM</sup> cable in zipcord style with an overall 3.0 mm Riser, Plenum, or CPR-rated LSZH jacket.

SSF<sup>TM</sup> Duplex is ideal for inter-building or intrabuilding data communication backbones. The cable's zipcord construction allows easy separation of the fiber strands if desired.

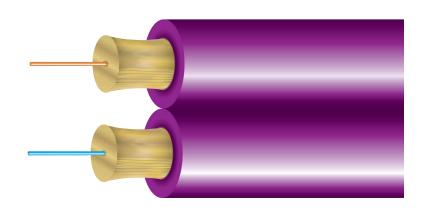
Cleerline SSF<sup>™</sup> Duplex Multimode is fully compatible with all common connector systems for standard 50/125 multimode fibers. The included SSF<sup>™</sup> fibers provide extreme durability and strength, with up to 10,000 times the bend insensitivity of traditional fiber.

## FEATURES AND BENEFITS

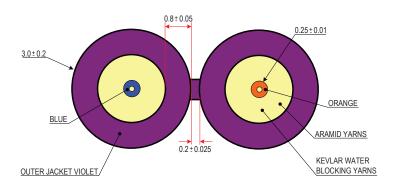
- Zipcord construction easy to separate strands
- High mechanical strength, superior fatigue (nD = 30)
- Compatible with common connector systems for 50/125 multimode fibers
- Up to 10,000x the bend longevity of traditional fiber
- Integral SSF<sup>™</sup> coating provides glass protection
- Increased safety due to incredible bend insensitivity
- Exclusive 250 μm Soft Peel acrylate

## **APPLICATIONS**

- Inter-/Intra-building voice or data communication
- Installation in ducts or underground conduit
- Fiber-to-the-desk (FTTD) / Fiber-to-the-Home (FTTH)
- ETL listed type OFNP for installation in ducts, plenums and other spaces used as environmental air returns when installed in accordance with NEC article 770-51 (a) and 770-53(a)



**3D VIEW** 



**TYPICAL CROSS SECTION** 

PART NUMBER	FIBERS	DESCRIPTION	TYPE Riser/Plenum/Lszh	0.D.	WEIGHT (LB / 1000 FT)
D50125MOM4X	2 Fibers	Duplex 50/125 SSF - 1000 ft Spool	X= R/P/L	3.0 mm x 2	13.2
D50125M0M4X-B	2 Fibers	Duplex 50/125 SSF - Cut to Order	X = R/P/L	3.0 mm x 2	13.2

## **CONSTRUCTION**

FIBER	
Fibers	2
Туре	50/125 Multimode 0M4
Coating	250 μm "Soft Peel" S-Type Coating (1 = Blue, 2 = Orange)
Color Coding	Per TIA/EIA 598C

JACKET		
Туре	Riser Rated PVC (Indoor) / Plenum Rated PVC + UV I/O / CPR LSZH (Indoor/Outdoor)	
Color Violet		
Outer Diameter	3.0 mm x 2 (6.2 mm)	
Markings	Sequential Foot Markings	
Strength Member	Kevlar (Plenum + water blocking yarns)	





PHYSICAL DATA		
Storage Temperature Range	-40°C to +85°C	
Operating Temperature Range	-20°C to +75°C	
Max Tensile Load (Installation)	1000 N (225 lbf)	
Max Tensile Load Long Term	500 N (112 lbf)	
Min. Bend Radius, Unloaded	1 x 0.D.	
Cable Outside Diameter, Nominal	3.0 mm x 2	
Cable Package	1000 ft Reel or customer request, spooled	
Rating	FT4 - Riser / FT6-Plenum / CPR LSZH	
Crush Resistance (TIA/EIA 455-41A)	100 kgf / mm	
Impact Resistance (TIA/EIA 455-25B)	1500 impact cycles	
Flexing @ 90 degrees (TIA/EIA 455-104A)	2000 flexing cycles	

PHYSICAL CHARACTERIST	ics		
Core Diameter	$50.0 \pm 2.5  \mu \text{m}$		
Core Non-circularity	≤ 6%		
Core / Hybrid Cladding Concentricity Error	≤ 3.0 µm		
Hybrid Cladding Diameter	125 ± 0.7 μm		
Hybrid Cladding Non- Circularity Error	≤ 3.0%		
Soft Peel Jacket Identifier	$250 \pm 0.7 \mu m$		
Coating Strip Force	100 g		
Fiber Curl	≥ 2 m		
Proof Test	100 kpsi		
Dynamic Fatigue 23°C, 41% R.H.	> 30 nD		
Bend Induced Attenuation, 1300 nm	100 turns around 75 mm diameter mandrel	≤ 1.0 dB	
Length	1.0 - 8.8 Km		

<b>ENVIRONMENTAL CHARACTERISTICS</b>	3
Temperature Dependence, 850 nm and 1300 nm	$\leq 0.5 \text{ dB / km}$
Induced Attenuation	-60°C to + 85°C
Watersoak Dependence, 850 nm and 1300 nm	$\leq 0.5 \text{ dB / km}$
Induced Attenuation at 23°C for 30 days	
Damp Heat Dependence, 850 nm and 1300 nm	$\leq 0.5 \text{ dB / km}$
Induced Attenuation at 85°C, 85% R.H., 30 days	
Dry Heat Dependence, 850 nm and 1300 nm	$\leq 0.5 \text{ dB / km}$
Induced Attenuation at 85°C, 30 days	

OPTICAL CHARACTERISTICS			
Attenuation Coefficient	850 nm	$\leq 3.0 \text{ dB/km}$	
	1300 nm	$\leq$ 1.0 dB/km	
Numerical Aperture		$0.200 \pm 0.015$	
Overfilled Modal Bandwidth	850 nm	≥ 3500 MHz · km	
	1300 nm	$\geq 500~\text{MHz}\cdot\text{km}$	
High Performance EMB	850 nm	≥ 4700 MHz · km	

BACKSCATTER CHARACTERISTICS			
Attenuation Directional Uniformity	≤ 0.05 dB/km		
Attenuation Uniformity	≤ 0.05 dB/km		
Group Index of Refraction	850 nm	1.481	
	1300 nm	1.476	

## COMPLIANCE

ETL Listed Type OFNR, CSA FT4, IECA S-83-596 & OFNP, CSA FT6 / IECA S-104-696,. LSZH Listed CPR Cca-s1a, d1, a1. DoP Available on Request. RoHS Compliant Directive 2011/65/EU SSFTM conforms to the requirement of IEC 60793 A1a, ISO/IEC 11801 & ITU-T G.651.1 850 nm Laser-Optimized 50  $\mu m$  core multimode fiber for 10 Gb/s and above applications.



