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

SSF™ Duplex is ideal for inter-building or intra-building data communication backbones. The cable’s ziptield construction allows easy separation of the fiber strands if desired.

Cleerline SSF™ Duplex Multimode is fully compatible with all common connector systems for standard 50/125 multimode fibers. The included SSF™ 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™ 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)

**FIBER**

- Fibers 2
  - Type 50/125 Multimode OM4
  - Coating 250 µm “Soft Peel” S-Type Coating (1 = Blue, 2 = Orange)
  - Color Coding Per TIA/EIA 598C

**JACKET**

- Type 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)

**TYPICAL CROSS SECTION**

**CONSTRUCTION**

**PART NUMBER**  | **FIBERS** | **DESCRIPTION** | **TYPE** | **O.D.** | **WEIGHT**  
--- | --- | --- | --- | --- | ---  
D50125M0M4X | 2 Fibers | Duplex 50/125 SSF - 1000 ft Spool | R/P/L | 3.0 mm x 2 | 13.2 LB / 1000 FT  
D50125M0M4X-B | 2 Fibers | Duplex 50/125 SSF - Cut to Order | R/P/L | 3.0 mm x 2 | 13.2 LB / 1000 FT  

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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 O.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 CHARACTERISTICS

Core Diameter 50.0 ± 2.5 μm
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 ± 0.7 μm
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

ENVIRONMENTAL CHARACTERISTICS

Temperature Dependence, 850 nm and 1300 nm ≤ 0.5 dB / km
Induced Attenuation -60°C to +85°C
Watersoak Dependence, 850 nm and 1300 nm ≤ 0.5 dB / km
Induced Attenuation at 23°C for 30 days
Damp Heat Dependence, 850 nm and 1300 nm ≤ 0.5 dB / km
Induced Attenuation at 85°C, 85% R.H., 30 days
Dry Heat Dependence, 850 nm and 1300 nm ≤ 0.5 dB / km
Induced Attenuation at 85°C, 30 days

OPTICAL CHARACTERISTICS

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