

9/125 SSF™ + BSF™ Single Mode OS2, 3.0 mm Jacketed Hybrid Duplex Demarc Cable

Type: OS2, OFNP, Type G.657.A2, G657.B2, G.652.D



Cleerline SSF™ Hybrid Demarc cable is composed of one strand of SSF™ cable and one strand of BSF™ BendSafe traditional fiber in zipcord style with an overall 3.0 mm Plenum-rated jacket.

SSF™ Hybrid Demarc cable is intended to provide a solution for service providers and SSF™ installers. The included BSF™ fiber is a bend-insensitive fiber with a 900 µm buffer coating. The BSF™ fiber does not have SSF™ polymer coating and requires traditional termination and handling. It is intended for the use of service providers who may encounter this cable after installation and be unfamiliar with SSF™ fiber technology.

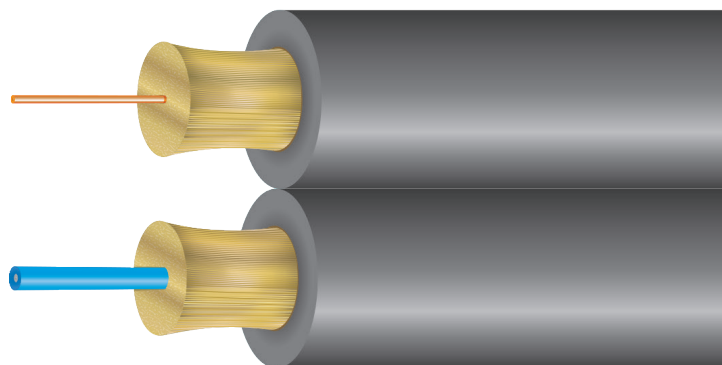
Cleerline SSF™ Hybrid Demarc Single Mode cable is fully compatible with all common connector systems for standard 9/125 single mode fibers.

FEATURES AND BENEFITS

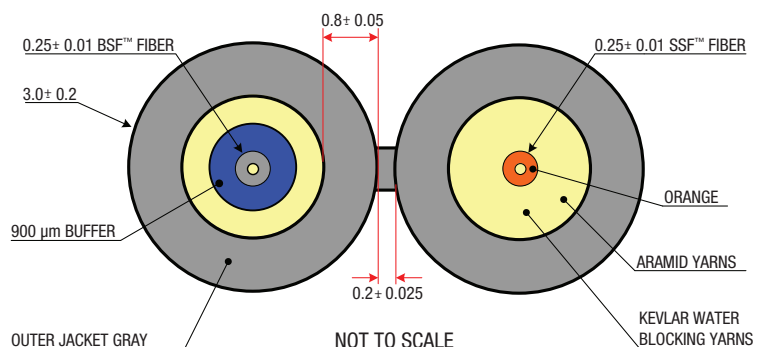
- Zipcord construction - easy to separate strands
- Compatible with common connector systems for 9/125 single mode fibers
- BSF™ allows fusion splicing without removal of SSF™ polymer coating
- Color coated fibers: BSF™ = blue; SSF™ = orange

APPLICATIONS

- Service demarc
- Installations requiring both mechanical splice and fusion splice terminations



3D VIEW



TYPICAL CROSS SECTION

| PART NUMBER | FIBERS | DESCRIPTION | TYPE RISER/PLENUM/LSZH | O.D. | WEIGHT (LB / 1000 FT) |
|----------------|----------|--|------------------------|------------|-----------------------|
| DH9125SMOS2P | 2 Fibers | Hybrid Demarc Duplex 9/125 SSF - 1000 ft Spool | Plenum | 3.0 mm x 2 | 13.2 |
| DH9125SMOS2P-B | 2 Fibers | Hybrid Demarc Duplex 9/125 SSF - Cut to Order | Plenum | 3.0 mm x 2 | 13.2 |

CONSTRUCTION

| FIBER | |
|--------------|---|
| Fibers | 2 |
| Type | 9/125 Single Mode OS2 |
| Coating | 900 µm BSF™ BendSafe Fiber = blue 250 µm "Soft Peel" S-Type Coating = orange |
| Color Coding | Per TIA/EIA 598C |

| JACKET | |
|-----------------|--|
| Type | Plenum Rated PVC + UV I/O |
| Color | Grey |
| Outer Diameter | 3.0 mm x 2 (6.2 mm) |
| Markings | Sequential Foot Markings |
| Strength Member | Kevlar (Plenum + water blocking yarns) |

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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) |
| SSF™ Min. Bend Radius, Unloaded | 1 x O.D. |
| BSF™ Min. Bend Radius, Unloaded | 10 x O.D. |
| Cable Outside Diameter, Nominal | 3.0 mm x 2 |
| Cable Package | 1000 ft Reel / Customer request, spooled |
| Rating | FT6-Plenum |
| SSF™ Crush Resistance (TIA/EIA 455-41A) | 100 kgf / mm |
| SSF™ Impact Resistance (TIA/EIA 455-25B) | 1500 impact cycles |
| SSF™ Flexing @ 90 degrees (TIA/EIA 455-104A) | 2000 flexing cycles |

SSF™ PHYSICAL CHARACTERISTICS

| | |
|--|--|
| 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 | 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, 1550 nm | 1 turn around 10 mm radius ≤ 0.3 dB |
| | 10 turns around 15 mm radius mandrel ≤ 0.03 dB |
| Bend Induced Attenuation, 1625 nm | 1 turn around 10 mm radius ≤ 1.0 dB |
| | 10 turns around 15 mm radius mandrel ≤ 0.2 dB |

SSF™ OPTICAL CHARACTERISTICS

| | | |
|----------------------------|---------------------------------|--------------|
| Attenuation Coefficient | 1310 nm | ≤ 0.35 dB/km |
| | 1550 nm | ≤ 0.21 dB/km |
| Mode Field Diameter | 1310 nm | 8.6 ± 0.4 μm |
| | 1550 nm | 9.7 ± 0.5 μm |
| Cable Cut-off Wavelength | ≤ 1260 nm | |
| Zero Dispersion Wavelength | 1310 nm - 1324 nm | |
| Zero Dispersion Slope | 0.092 ps / nm ² · km | |

BSF™ PHYSICAL CHARACTERISTICS

| | | |
|-------------------------------------|---|----------|
| Core / Cladding Concentricity Error | ≤ 0.5 μm | |
| Cladding Diameter | 125 ± 1.0 μm | |
| Cladding Non-Circularity Error | ≤ 1.5 μm | |
| Acrylate Coating Diameter | 245 ± 0.10 μm | |
| Coating Strip Force | ≤ 130 g | |
| Fiber Curl | ≥ 4 m | |
| Proof Test | 100 kpsi | |
| Bend Induced Attenuation, 1300 nm | 2 turns around 15 mm diameter mandrel | ≤ 0.2 dB |
| | 2 turns around 7.55 mm diameter mandrel | ≤ 0.5 dB |
| Length | 1.1 - 8.8 Km | |

BSF™ 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 | ≥ 1500 MHz · km |
| | 1300 nm | ≥ 500 MHz · km |
| High Performance EMB | 850 nm | ≥ 2000 MHz · km |

ENVIRONMENTAL CHARACTERISTICS

| | |
|--|-----------------|
| Temperature Dependence, 1310 nm and 1550 nm | ≤ 0.05 dB / km |
| Induced Attenuation | -60°C to + 85°C |
| Watersoak Dependence, 1310 nm and 1550 nm | ≤ 0.05 dB / km |
| Induced Attenuation at 20°C for 30 days | |
| Damp Heat Dependence, 1310 nm and 1550 nm | ≤ 0.05 dB / km |
| Induced Attenuation at 85°C, 85% R.H., 30 days | |
| Dry Heat Dependence, 1310 nm and 1550 nm | ≤ 0.05 dB / km |
| Induced Attenuation at 85°C, 30 days | |

COMPLIANCE

| | |
|--|--|
| ETL Listed Type OFNP, CSA FT6 / IECA S-104-696. RoHS Compliant Directive 2011/65/EU |   |
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