

COMPONENT SPECIFICATIONS

50/125 SSF™ Multimode OM4, 3.0mm Jacketed Simplex Riser / Plenum I/O / LSZH Cables



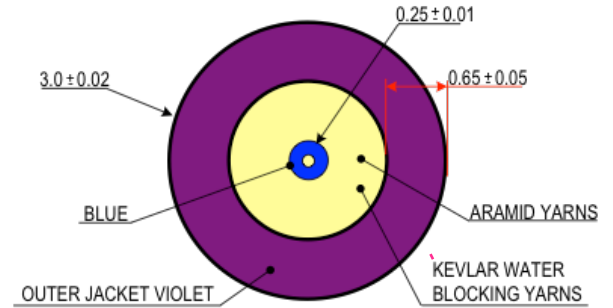
Type OM4, OFNR, CSA FT4 / OFNP, CSA FT6 / LSZH

Cleerline SSF™ advanced optical glass fibers are much stronger, safer, and faster terminating than typical fibers. This distribution style cable provides the ultimate in durability and bend in a very compact size. SSF™ fibers are always protected at the glass level as a result of their integral polymeric coating, increasing both bend and tensile strength to unprecedented levels. Cleerline SSF™ fibers are compatible with all common connector systems on the market for standard 50/125 multimode and 9/125 Singlemode fibers.

Features And Benefits:

- * High mechanical strength and superior fatigue & durability
- * Integral coating eliminates stripping, provides glass protection
- * 10,000x the bend of standard fiber, Fatigue constant (Nd) > 30
- * Increased safety factor due to the incredible bend insensitivity
- * Glass fiber remains protected at all times from the elements
- * Simplified termination process designed for ease of use
- * Ultra low Attenuation loss on tight bend radius
- * Exclusive 250um Soft peel jacket identifier

Simplex Typical Cross Section



CONSTRUCTION

FIBER

Fiber Count = 1
50/125 Multimode OM4
250um "Soft Peel" S-Type coating
Color Coding per TIA/EIA 568C

JACKET

Riser Rated PVC / Plenum Rated PVC + UV I/O / LSZH
3.0mm unit diameter
Violet jacket = Multimode fiber OM4
Sequential footage markings
Kevlar (Plenum/LSZH + water blocking yarns Indoor/Outdoor)

PHYSICAL DATA

Storage Temperature Range = -40°C to +85 °C
Operating Temperature Range = -20°C to +75 °C
Max Tensile Load for Installation = 1000(225) N (lbf)
Max Tensile Load Long term = 500(112) N (lbf)
Min. Bend Radius, Unloaded = 1 x OD (1 x 3.0mm)
Cable Outside Diameter, Nominal = 3.0mm
Cable Package = 1000ft/304.8m Reel*

*Or customer request, spooled

Rating = FT4-Riser / FT6-Plenum / LSZH
Crush Resistance (TIA/EIA 455-41A) = 100 kgf/mm
Impact Resistance (TIA/EIA 455-25B) = 1500 Impact cycles
Flexing @ 90 degree (TIA/EIA 455-104A) = 2000 flexing cycles

APPLICATIONS

Inter-building and intra-building voice or data communication backbones requiring 3.0mm jacket diameter. Install in ducts, underground conduits or aerial/lashed. Light weight ultra flexible design simplifies installation.
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)

ENVIRONMENTAL CHARACTERISTICS

Temperature Dependence at 850 nm and 1300 nm ≤ 0.05 (db/km)
Induced Attenuation - 60°C to +85°C
Watersoak Dependence at 850 nm and 1300 nm ≤ 0.05 (db/km)
Induced Attenuation at 20°C for 30 days
Damp Heat Dependence at 850 nm and 1300 nm ≤ 0.05 (db/km)
Induced Attenuation at 85°C, 85%R.H., 30 days
Dry Heat Dependence at 850 nm and 1300 nm ≤ 0.05 (db/km)
Induced Attenuation at 85°C, 30 days

PART NUMBERS

PART NUMBER	PART DESCRIPTION	FIBER COUNT	NOMINAL DIAMETER	CABLE WEIGHT	TOTAL WEIGHT
S50125MOM4R	Simplex Riser	1 Fiber/s	3.0mm	6.61 lbs/kft	7.71 lbs
S50125MOM4P	Simplex Plenum	1 Fiber/s	3.0mm	6.61 lbs/kft	7.71 lbs
S50125MOM4L	Simplex PLSZH	1 Fiber/s	3.0mm	6.61 lbs/kft	7.71 lbs

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 & above applications

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	850nm	≥ 4700 (MHz · km)

BACKSCATTER CHARACTERISTICS

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

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 Diameter	250 ± 0.7 (μm)
Coating Strip Force	100 (g)
Fiber Curl	≤ 2 (m)
Dynamic Fatigue Constant (Nd)	> 30
Proof Test	100 (kpsi)
Bend Induced Attenuation at 1300 nm (100 turns around a mandrel of 75 mm diameter)	≤ 1.0 (dB)
Dynamic fatigue 23C, 41%RH	> 30(nd)
Length	1.0 - 8.8 (Km)

COMPLIANCE

ETL Listed Type OFNR, CSA FT4, IECA S-83-596 & OFNP, CSA FT6, or LSZH-non ETL/ IECA S-104-696. GR-409
RoHS Compliant Directive 2011/65/EU

