

MULTIMODE OM3 SEMI TIGHT BUFFER OPTICAL FIBER CABLE



1.1 SCOPE

This listed specification covers the design requirements and performance standard for the supply of optical fiber cable in the industry. It also includes UCS Cabling Systems premium designed cable with optical, mechanical and geometrical characteristics

CABLE TYPE : OM3, Semi Tight Buffer

APPLICATIONS :

- Indoor
- Distribution, Feeder
- Multiple network applications

1.2 Cable Description

Cable possesses high tensile strength and flexibility in compact cable sizes. At the same time, it provides excellent optical transmission and physical performance.

1.3 RELIABILITY

Both initial and periodic qualification testing are performed to assure the cable's performance and durability in the field environments . The cables are designed, manufactured and tested according to international standards.

2. CABLE STRUCTURE

Zip Duplex Semi Tight Buffer fiber optic patch cable is constructed with two simplex units joint together with a central web ideal for use in office LAN connectors, patchcords , pigtails and internal point-to -point links where frequent handing is likely (E.g) data cabinets, equipment room, user outlets. 600um or 900um buffered fibre, the cable as suitable for use with industry standard connector and can be easily made into a patch cord.



FIBER CHARACTERISTICS

| Fiber Type | | 0.9 Multi-mode Tight Buffer Tube | | |
|--|---------------|----------------------------------|-------------|-------------|
| | | Class A | Class B | Class C |
| Attenuation (dB/km) | @850nm | ≤ 2.30 | ≤ 2.30 | ≤ 2.30 |
| | @1300nm | ≤ 0.60 | ≤ 0.60 | ≤ 0.60 |
| OFL Bandwidth(Mhz.km) | @850nm | ≥700 | ≥1500 | ≥3500 |
| | @1300nm | ≥500 | ≥500 | ≥500 |
| Effective modal bandwidth(Mhz.km) | @850nm | ≥900 | ≥2000 | ≥4700 |
| | @1300nm | ≥500 | ≥500 | ≥500 |
| Application support distance | 10GESX(850nm) | 150m | 300m | 550m |
| | GE-SX(850nm) | | 1000m | 1000m |
| | GE-LX(1300nm) | | 600m | 600m |
| Numerical aperture | | 0.200±0.015 | 0.200±0.015 | 0.200±0.015 |
| Effective group index(Neff)@850nm | | 1.482 | 1.482 | 1.482 |
| Effective group index(Neff)@1310nm | | 1.477 | 1.477 | 1.477 |
| Back scatter characteristics(@1300nm) | | | | |
| Point discontinuity(average of bidirectional measurement) | | | | ≤0.10dB/km |
| Irregularities over fiber length and point discontinuity | | | | ≤0.10dB/km |
| Attenuation uniformity | | | | 0.08dB/km |
| Back scatter characteristics(@1300nm) | | | | |
| Core Diameter | | | | 50±2.5µm |
| Core non-circularity | | | | ≤5.0% |
| Cladding diameter | | | | 124.8±1.0µm |
| Cladding non-circularity | | | | ≤1.0% |
| Core/cladding concentricity error | | | | ≤1.0µm |
| Coating diameter | | | | 245±7µm |
| Coating/Cladding concentricity error | | | | ≤12.0µm |
| Environmental characteristic @850nm & 1300nm | | | | |
| Temperature induced attenuation(-60~+85°C) | | | | ≤0.10dB/km |
| Dry heat induced attenuation(85°C±2°C, 30days) | | | | ≤0.10dB/km |
| Water immersion induced attenuation(85°C±5°C,RH85%,30days) | | | | ≤0.10dB/km |
| Damp heat induced attenuation(85°C±2°C,RH85%,30days) | | | | ≤0.10dB/km |
| Mechanical characteristic | | | | |
| Proof test | | | | ≥0.69GPa |
| Coating strip force(typical value) | | | | 1.5N |

| | | |
|--|------------------------|-------------|
| Dynamic stress corrosion susceptibility parameter(typical value) | | ≥20 |
| Macro-bend Loss (100 turns,Φ75m) | @850nm | ≤0.5dB |
| | @1300nm | ≤0.5dB |
| CABLE CHARACTERISTICS | | |
| Outer diameter | mm | 3.0*5.0 |
| Weight | Kg/km | 8.2 |
| Max load | N | 300 |
| Breaking load | N | 100 |
| Min Bend radius | Times diameter | 20 |
| Min Bend radius | Times diameter | 10 |
| Crush Load(N) | Long term 1000 N/100mm | |
| Environmental Characteristics | | |
| Fire performance | | LSZH |
| Operation temperature | °C | -20 to + 60 |
| Installation temperature | °C | -20 to + 60 |
| Transport and storage temperature | °C | -20 to + 70 |

STANDARDS :

- IEC 60754-1
- IEC 60332-1
- YD/T 1997-2009
- IEC 61034-2
- ISO/IEC 11801
- RoSH Complaint

TECHNICAL SPECIFICATIONS

| Package | |
|----------------------|--------------------|
| Length and packaging | 1000m/plywood reel |
| Plywood reel size | 300*110*230mm |
| Carton size | 310*310*250mm |
| Net weight | 20.0kg/km |
| Gross weight | 22.0kg/box |

