# Outdoor Single Mode FTTH Drop Fiber Cable - 1 Core

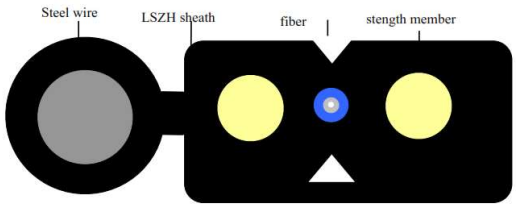
BSF-ODSMFT1

Broadstick provides high quality fiber optic cables compliant with TIA 568-C.3-1.

This Outdoor Single mode FTTH Drop Fiber Optic Cable provides a proper connection for FTTH networks, the operation is simple; the use is more convenient, greatly improving the working efficiency.

This cable offers good mechanical environmental characteristics and the Anti-UV characteristics meet the requirements of the FTTH standards.

Our fiber optic cables are factory tested complying with the requirements of the industry.




## Specification:

| | |
|---|---|
| **Number of Fiber** | 1 Core |
| **Fiber Type** | G567A1 |
| **Strength Member Material** | Steel Wire |
| **Strength Member Diameter** | 2*(0.5-0.8)mm |
| **Self Support Messenger material** | FRP |
| **Self Support Messenger Diameter** | 1.0 mm |
| **Outer sheath material** | LSZH |
| **Outer sheath Diameter** | 1.8mm |
| **Cable Size with Steel Wire** | 2.0mm x 5.2 mm |
| **Cable Size without Steel Wire** | 2.0mm x 3.0 mm |

Our devices and factories have passed many quality system verifications, like CE, RoHS, FCC, that compliant with international quality standards that assure the production. We strictly implement the standardized management to control the design, production, and service.

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## Cable Mechanical Characteristic

| Items | | Description |
|---|---|---|
| Installation Temperature range | | -20--+60℃ |
| Operation and transport temperature | | -40-+70℃ |
| Min Bending Radius(mm) | Long term | 15D |
| | short term | 30D |
| Allowable Tensile Strength(N) | Long term | 300 |
| | short term | 600 |

## Fiber Mechanical Characteristic

| Fiber style | | Unit | SM G657A1 |
|---|---|---|---|
| condition | | nm | 1310/1550 |
| attenuation | | dB/km | ≤3.5/0.21 |
| Dispersion | 1310nm | Ps/(nm*km) | ≤18 |
| | 1550nm | Ps/(nm*km) | ≤22 |
| Zero dispersion wavelength | | nm | 1312±10 |
| Zero dispersion slope | | ps/(nm²×Km) | ≤0.090 |
| PMD Maximum Individual Fiber | | [ps/√km] | ≤0.2 |
| PMD Design Link Value | | ps/(nm²×Km) | ≤0.08 |
| Fiber cutoff wavelength λc | | nm | ≧1180,≤1330 |
| Cable cutoff wavelength λcc | | nm | ..... |
| MFD | 1310nm | um | 9.0±0.4 |
| | 1550nm | um | 10.1±0.5 |
| Step(mean of bidirectional measurement) | | dB | ≤0.05 |
| Irregularities over fiber length and point discontinuity | | dB | ≤0.05 |
| Difference backscatter coefficient | | dB/km | ≤0.03 |
| Attenuation uniformity | | dB/km | ≤0.01 |
| Cladding diameter | | um | 124.8±0.1 |
| Cladding non-circularity | | % | ≤0.7 |
| Coating diameter | | um | 242±7 |
| Coating/chaffinch concentrically error | | um | ≤12.0 |

| | | | |
|---|---|---|---|
| Coating non circularity | | % | ≤6.0 |
| Core/cladding concentricity error | | um | ≤0.5 |
| Curl(radius) | | um | ≥4 |
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## Environmental Characteristics

**G657A1 fiber Environmental Characteristics (1310nm, 1500nm, &1625nm)**

| | | | |
|---|---|---|---|
| Temperature dependence Induced attenuation at | -60°C to +85°C | ≤0.05 | [db/Km] |
| Temperature-humidity cycling Induced attenuation at | -10°C to +85°C, 98% RH | ≤0.05 | [db/Km] |
| Watersoak dependence Induced attenuation at | 23°C for 30 days | ≤0.05 | [db/Km] |
| Damp heat dependence Induced attenuation at | 85°C and 85% RH for 30 days | ≤0.05 | [db/Km] |
| Dry heat aging at | 85°C | ≤0.05 | [db/Km] |

## Mechanical Specification

| | | | |
|---|---|---|---|
| Proof test | off line | ≧9.0 | [N] |
| | | ≧1.0 | [%] |
| | | ≧100 | [kpsi] |

## Macro-bend induced attenuation

| | | | |
|---|---|---|---|
| 100 turns around a mandrel of 50 mm dimeter | | | [dB] |
| 10 turns around a mandrel of 30 mm dimeter | 1550nm | ≤0.1 | [dB] |
| 10 turns around a mandrel of 30 mm dimeter | 1625nm | ≤0.3 | [dB] |
| 1 turn around a mandrel of 20 mm diameter | 1550nm | ≤0.1 | [dB] |
| 1 turn around a mandrel of 20 mm diameter | 1625nm | ≤0.5 | [dB] |
| Coating strip force | typical average force | 1.7 | [N] |
| | peak force | ≧1.3<br>≤8.9 | [N] |
| Daynamic stress corrosition susceptibility parameter nd(typical) | | ≧20 | |