

Fiber Optic Distribution Cable SM, G.657A2, Indoor/Outdoor Armored Loose Tube, LS0H, B2ca-s1a,d1,a1 ➤

Molex LS0H G.657A2 SM 9/125 μ m central loose tube fiber cable can be used for LAN and WAN applications. The cable is suitable for indoor applications in ducts and on trays and can be direct buried with sand back-filling in outdoor applications. The cable features corrugated steel tape armor for rodent protection and contains glass yarn strength members and a UV stabilized, LS0H EuroClass B2ca,s1a,d1,a1 sheath.

This single mode fiber provides improved performance across the entire 1260nm to 1625nm wavelength spectrum due to its low attenuation in 1383nm water-peak region.



SPECIFICATIONS

Commercial Standards

Fiber:

IEC 60793-2-50 Category B.1.3
 ISO/IEC 11801:2002, cat. OS2 and OS1
 ISO/IEC 24702: 2006, cat. OS2 and OS1
 ITU Recommendation G.652.D and C, B, A
 IEEE 802.3 – 2012
 EN 50173-1:2007, cat. OS2 and OS1
 ITU-G.657A2

Cable:

ISO 11801-1, EN 50173-1, IEC 60794-1
 RoHS Compliant
 EU Regulation 305/2011 (CPR)
 EN 50575:2014+A:2016
 EuroClass: B2ca,s1a,d1,a1
 DoP No: MLXCES-2018-F-059 located on web:
<https://www.molexces.com/about-us/dop-certificates/>

Mechanical

Fiber Attenuation IEC 60793-1-40

Maximum value of cable attenuation at 1625 nm: ≤ 0.25 dB/km
 Maximum value of cable attenuation at 1550 nm: ≤ 0.23 dB/km
 Maximum value of cable attenuation at 1310 nm: ≤ 0.38 dB/km

Group index of refraction IEC 60793-1-22

Group index of refraction at 1310 nm: 1.467
 Group index of refraction at 1550 nm: 1.467
 Group index of refraction at 1625 nm: 1.468

Attenuation variation vs Bending

10 turns on a mandrel R=15mm, @1550nm ≤ 0.03 dB
 10 turns on a mandrel R=15mm, @1625nm ≤ 0.1 dB
 1 turn on a mandrel R = 10 mm, @1550nm ≤ 0.1 dB
 1 turn on a mandrel R = 10 mm, @1625nm ≤ 0.2 dB
 1 turn on a mandrel R = 7.5 mm, @1550nm ≤ 0.5 dB
 1 turn on a mandrel R = 7.5 mm, @1625nm ≤ 1.0 dB

Mechanical Characteristics

Loose Tube gel filled
 Armoring: 0.15mm corrugated steel tape
 Strength member: Glass yarns
 Sheath: LS0H, UV stabilized
 Sheath Color: Yellow RAL 1018

www.molex.com/products/fiber/cables/

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Physical Properties IEC 60794-1-21/22

Attribute	Method	Limits
Nominal Outer Diameter	N/A	2-24 fibers: 8.5mm
Nominal weight	N/A	2-24 fibers: 100kg/km
Max installation tensile strength	E1	3000N
Permanent tensile strength	E1	1000N
Compressive Strength	E3	2200N/100mm
Torsion	E7	5 cycles +/- 1 turn
Min bend radius loaded	E11	R = 85mm
Temperature Range	F1	Storage: -40°C to +70° C, Operation: -30°C to +70°C Max attenuation variation at operational temperature range = MM 0.5 dB/km /SM = 0.2 dB/km

ORDERING INFORMATION

Order No.	SAP No.	Description
CFR-00857	183150188	Fiber Optic Cable G.657A2 9/125µm SM ARM LT LS0H, B2ca-s1a,d1,a1 4F
CFR-00858	183150189	Fiber Optic Cable G.657A2 9/125µm SM ARM LT LS0H, B2ca-s1a,d1,a1 6F
CFR-00859	183150190	Fiber Optic Cable G.657A2 9/125µm SM ARM LT LS0H, B2ca-s1a,d1,a1 8F
CFR-00860	183150191	Fiber Optic Cable G.657A2 9/125µm SM ARM LT LS0H, B2ca-s1a,d1,a1 12F
CFR-00861	183150192	Fiber Optic Cable G.657A2 9/125µm SM ARM LT LS0H, B2ca-s1a,d1,a1 24F

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