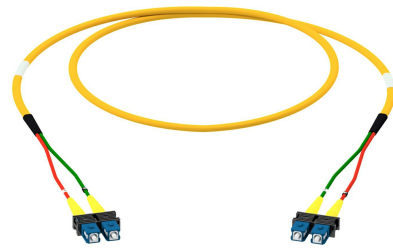


PRODUCTPROFILE

Catalogue number: 062A0179G657A1

Partnumber: 703846

Fiber optic duplex patchcord
Connector side A: SC-Duplex
Connector side B: SC-Duplex
9/125µm, double jacket 2x2,8/4,0x6,8mm,
yellow
Polarity: crossed A to B
Cable I-V(ZN)HH2x2,8E9/125µm,G657A1



Related documents:

DS_FASER G657A1_OE

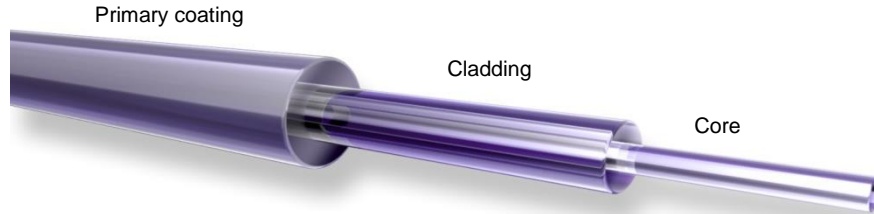
Fiber Data Sheet

DS_I-VZNHH2X28_900_L_OE

Cable Data Sheet

DS_SC_STECKER_OE

Steckerdatenblatt



Standards

Stepped index fiber 9/125µm according to
 -ISO/IEC 11801 und EN 50173-1 OS2
 -IEC 60793-2-50 type B1.3
 -ITU G.657.A1 und G.652.D

Structure

Silica fiber with two layer acrylate primary coating

Geometrical properties

| | |
|--------------------------------|--------------------|
| Modefield diameter @1310 nm | 9.2 µm +/- 0.4 µm |
| Modefield diameter @1550 nm | 10.4 µm +/- 0.5 µm |
| Cladding diameter | 125 µm +/- 0.07 µm |
| Cladding non-circularity | ≤ 0.7 % |
| Core-Cladding concentricity | ≤ 0.5 µm |
| Primary coating diameter | 242 µm +/- 5 µm |
| Coating-Cladding concentricity | < 12 µm |

Mechanical properties

Break strength SCREEN-Test 1 % strain for 1 s @100 kpsi

Thermal properties

Operating temperature range -60 to +85°C

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Transmission characteristics

Attenuation:

Cabled fiber tight buffered: @ 1310 nm max. 0.38 dB/km
@ 1550 nm max. 0.28 dB/km

Cabled fiber loose tube: @ 1310 nm max. 0.36 dB/km
@ 1550 nm max. 0.22 dB/km

Uncabled fiber: @ 1310 nm max. 0.32 dB/km
@ 1383 nm max. 0.32 dB/km
@ 1490 nm max. 0.21 dB/km
@ 1550 nm max. 0.18 dB/km
@ 1625 nm max. 0.20 dB/km

Macrobending, induced attenuation, uncabled fiber:

Radius 10 mm, 1 turn, @ 1550 nm ≤ 0.50 dB
Radius 10 mm, 1 turn, @ 1625 nm ≤ 1.50 dB
Radius 15 mm, 10 turns, @ 1550 nm . 0.05 dB
Radius 15 mm, 10 turns, @ 1625 nm ≤ 0.30 dB
Radius 25 mm, 100 turns, @ 1310, 1550 und 1625 nm ≤ 0.01 dB

Dispersion:

@ 1285 - 1330 nm ≤ 3.0 ps/(nm*km)
@ 1550 nm ≤ 18.0 ps/(nm*km)
@ 1625 nm ≤ 22.0 ps/(nm*km)

Polarization Mode Dispersion (PMD):

PMD Link Design Value ≤ 0.04 ps/√km
Maximum individual fiber PMD ≤ 0.1 ps/√km

Cut-off-Wavelength: ≤ 1260 nm

Effective group index of refraction:

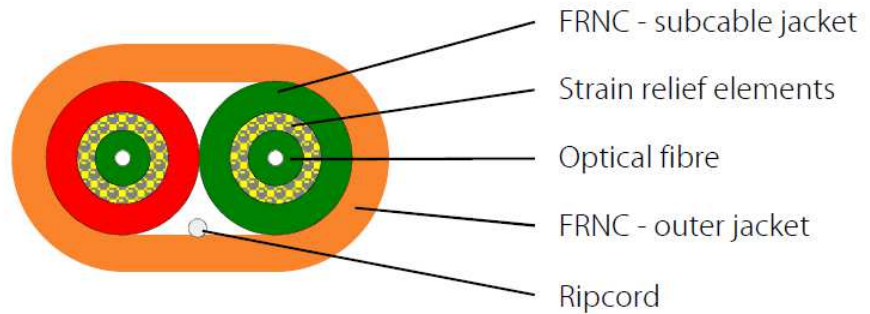
@ 1310 nm 1.4676
@ 1550 nm 1.4682

Backscatter attenuation @ 1ns pulse width:

@ 1310 nm -77 dB
@ 1550 nm -82 dB
@ 1625 nm -83 dB

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| Draft | Date | Approved | Date | Rev. | Engineering change number | Name | Date |
|-------------|----------|----------|----------|------|---------------------------|-------------|----------|
| H. Jungbäck | 12-04-15 | P. Maier | 12-04-15 | 001 | without | H. Jungbäck | 12-04-15 |



Standards

IEC 60794-2

Structure

Cable core:
buffered optical fiber, outer diameter 0.9 mm
colour: yellow (E9/125), green (G50/125), blue (G62.5/125)
Strain relief elements (aramid) Subcable-jacket halogen-free and flame-retardant material,
wall thickness approx. 0.5 mm,
colour: orange at multi-mode and yellow at single-mode
Outer diameter: 2.8 mm

Outer jacket:
Two break-out subcables parallel
Halogen-free and flame-retardant material (FRNC), wall thickness approx. 0.44 mm
Outer diameter approx. 4.0 mm x 6.8 mm

Standard colours:
Singlemode: yellow
Multimode 50 µm: orange or green
Multimode OM3: aqua (turquoise)
Multimode 62.5 µm: orange
Multimode OM4: violet

Ripcord under the jacket
Inkjet marking black acc. to separate drawing

Geometrical properties

| Number of fibers | Outer diameter [mm] | Weight [kg/km] | Fire load [MJ/m] |
|------------------|---------------------|----------------|------------------|
| 2 | 4.0 x 6.8 | 32 | 0.83 |

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Fiber Optic Cable
I-V(ZN)HH 2x 2.8mm... 900µm

033AXXXX

Mechanical properties

Min. bending radius fixed (static) acc. IEC 60794-1-2 E11A 10 x outside diameter
Min. bending radius during assembly (dynamic), with additional tensile strain acc. IEC 60794-1-2 E6 15 x outside diameter
Max. tensile force acc. IEC 60794-1-2 E1 600 N
Max. crush resistance acc. IEC 60794-1-2 E3, long term 600 N/dm

Thermal properties

Transport and storage - 25°C to + 70°C
Installation - 5°C to + 50°C
In use - 5°C to + 70°C

Chemical properties

No resistance to oil, petrol, acid, leach and water

Fire performance

-Flame-retardant acc. to IEC 60332-1-2 and IEC 60332-3-22 Cat. A
 -Smoke density acc. to IEC 61034
 -Halogen-free acc. to IEC 60754-1
 -Acidity of the combustion gases acc. to IEC 60754-2

Transmission characteristics

See fiber data sheets

Applications

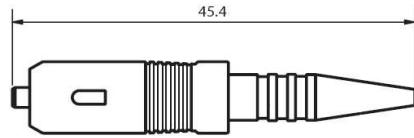
Indoor cable for the installation in cable ducts and in tubes and also suitable for interconnections
 For direct connector assembly
 Ideal for fiber to the desk

Deliveryform

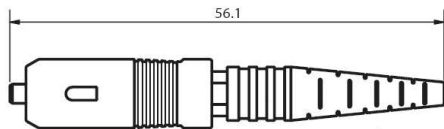
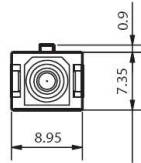
Disposable drums

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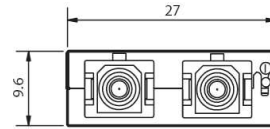
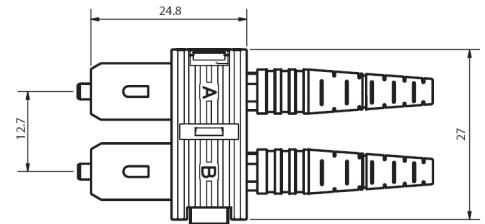
| Draft | Date | Approved | Date | Rev. | Engineering change number | Name | Date |
|----------|------------|-------------|------------|------|---------------------------|----------|------------|
| P. Maier | 03.08.2016 | H. Jungbäck | 03.08.2016 | 001 | without | Y. Zhang | 22.06.2017 |



SC-simplex, buffered fiber



SC-simplex, cable



SC-duplex

All dimensions are in mm; tolerances acc. ISO 2768 m-H

Properties

Standard SC connectors for applications in telecommunications, data center, cabling and LAN, connections to active components.

Interface

SC, acc. to IEC 61754-4

Material for connectors

Ferrule : Zirconia ceramic, Ø 2.5 mm
 Body : Plastics
 Boot : Plastics

Optical data

| | Typical | max. |
|----------------------|--------------------------------------|---------|
| Insertion Loss : S/M | 0.20 dB | 0.40 dB |
| M/M | 0.20 dB | 0.40 dB |
| Return Loss : S/M | ≥45 dB(PC), ≥55 dB(UPC), ≥65 dB(APC) | |
| M/M | ≥30 dB | |

Mechanical data

Mating cycle ≥ 1000
 Strain relief 100 N(dependent on the cable type)

Environmental data

Operation temperature range -40°C to +85°C
 Storage temperature range -40°C to +85°C

Suitable cables

Cable Types : Ø 0.9 ~ 3.5 mm

Packaging

Standard Packaging.

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| Connector Part | Part No |
|--------------------------------------|----------------|
| Connector Body | |
| Singlemode, PC, blue | 98 SCS 120-101 |
| Singlemode, APC, green | 98 SCS 110-101 |
| Multimode, 50 µm, black | 98 SCS 130-101 |
| Multimode, 62.5 µm, beige | 98 SCS 130-102 |
| Duplex clip, black | 98 ZD 02-0BK |
| Crimp sleeve | |
| for Ø 2.1 | 98 ZC 05-000 |
| for Ø 2.8-3.5 | 98 ZC 04-000 |
| Boot, Ø 0.9 mm buffered fiber | |
| blue | 98 ZB 06-0BU |
| green | 98 ZB 06-0GN |
| black | 98 ZB 06-0BK |
| yellow | 98 ZB 06-0YE |
| red | 98 ZB 06-0RD |
| Boot, Ø 2.1 mm cable | |
| blue | 98 ZB 05-0BU |
| green | 98 ZB 05-0GN |
| black | 98 ZB 05-0BK |
| yellow | 98 ZB 05-0YE |
| red | 98 ZB 05-0RD |
| Boot, Ø 2.8-3.5 mm cable | |
| blue | 98 ZB 04-0BU |
| green | 98 ZB 04-0GN |
| black | 98 ZB 04-0BK |
| yellow | 98 ZB 04-0YE |
| red | 98 ZB 04-0RD |



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|---------|------------|------------|------------|------|---------------------------|---------|------------|
| Draft | Date | Approved | Date | Rev. | Engineering change number | Name | Date |
| Y.Zhang | 29.03.2017 | H.Jungbäck | 29.03.2017 | 002 | --- | Y.Zhang | 29.03.2017 |