Dual-ended SC Connector Self-bonding Transparent Fiber Datasheet

Building an Efficient Fiber Infrastructure.

Overview

Self-bonding transparent fibers are applicable to indoor FTTH or FTTR networking scenarios. They are delivered with adhesive and can be quickly attached to suitable wall surfaces after the release film is removed.

After routing the optical cable, use adhesive or cable clips fixed. It has an elegant appearance, does not affect residence decoration and can be conveniently routed on various decoration materials.

⚠ CAUTION

- Do not leave the optical cable in a vehicle exposed to sunshine. The adhesive will melt at a temperature higher than 60° C and cause optical cable adhesion so that construction is impossible.
- For details about how to construct the transparent optical cables, see the hyperlink 14130BQB Self-Bonding Transparent Fiber Construction Guide 01.

Features & Benefits

- Self-bonding without heating for quick cabling after removing the release film.
- Passed the CPR Dca flame retardant certification, meeting the fireproof requirements, and applicable to indoor scenarios.
- Transparent design for aesthetic cabling.

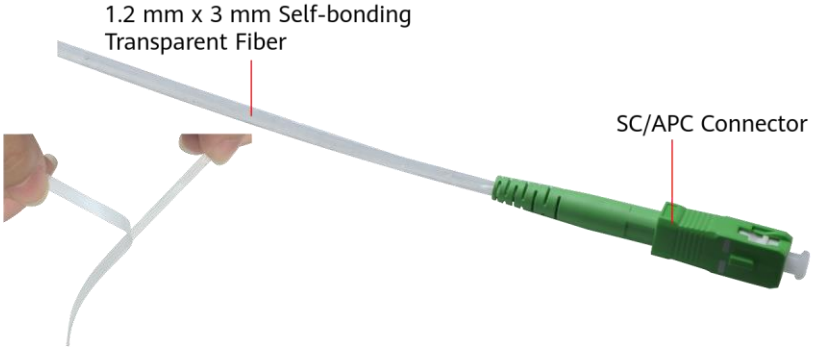
General Specifications

Cable assembly type	Patch cord
Environment	Indoor
Packaging	Separate packing
Application	Indoor/Corridor
Termination	Dual-ended SC/APC
Working temperature range	-25ºC to +70ºC
Working humidity	5% RH to 95% RH
Min. Installation Temperature	5ºC
Transport temperature range	-40ºC to +70ºC

Structure

10 20 30 m

100 m

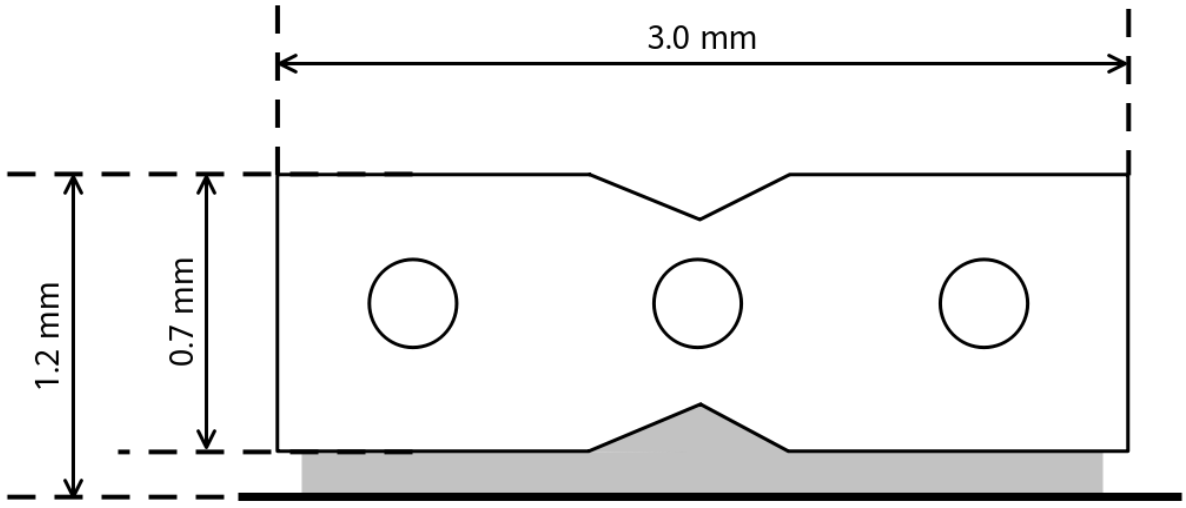


NOTICE

Transparent optical cable is a pre-adhesive cable. It needs to be installed in three steps:

- Attach corner protector to the corners along the cabling path in advance ensure bending radius⩾5mm.
- Remove the release film and attach the transparent fiber to a proper wall surface.
- Must use cable clips or adhesive to reinforce corners and door gap to achieve reliability.
- Glue or clip straight sections for reinforcement if necessary.

Cross Section



Wall Surfaces Recommended for Construction

Scenario	Picture	Scenario	Picture
Latex paint		Wallpaper	
Wooden wall		Metal wall	
PVC wall			

Not allowed construction

Scenario	Description	Picture
Stone wall surface	Do not deploy the optical cable on a stone wall surface which is uneven and cannot attach the optical cable securely.	
Concrete wall surface	Do not deploy the optical cable on a concrete wall which is course and flaky and cannot attach the optical cable securely.	
Organic resin base material wall	Organic resin base material walls (also called imitation marble plates), including epoxy resin base material wall, epoxy floor paint, and unsaturated resin base material wall	

Scenario	Description	Picture
Weak attaching scenario	If the surface is made of smooth materials such as glass cement, glass, and glazed marble, the hot melt adhesive cannot be attached to the background. Therefore, it is not recommended that the transparent optical cable be routed on such surfaces.	 
Passing through the upper side of a multi-layer door frame	If there is no seam or space for routing the optical cable on the top of a door frame, do not route transparent optical cables there.	
Aluminum alloy door frame	An aluminum alloy door frame with a sliding door will definitely break the optical cable. Therefore, do not route transparent optical cables there.	
Dusty and low-adhesion surface	For dirty walls that cannot be cleaned, coarse diatom mud walls*, granular walls, and other walls with rough surfaces, hot melt adhesive may not be able to attach the optical cable. Therefore, do not route transparent optical cables there.	
Flaky wall surface	If a wall may become moist due to seasonal changes, the wall surface may flake off. Therefore, do not route transparent optical cables there.	 
Rusty and corroded wall	A rusty metal surface is easy to flake off and not suitable for cable routing.	
Moist wall surface	A moist wall surface has a weak adhesion and is not suitable for cable routing.	
Non-indoor scenario	Transparent optical cables cannot be routed outdoors, through pipes (pulling force ≥ 40 N), or vertically.	

NOTICE

- Coarse diatom mud walls*: Considering the diversity of materials and techniques of home decoration, construction personnel need to further judge whether the construction can continue based on the actual state and adhesion effect of the construction surface.
- If a scenario is not listed in Table, confirm with Huawei before performing the construction.

Specifications

Dimensions and Descriptions of Cable Constructions

Cable diameter (mm)	1.2 x 3.0
Cable length (m)	10, 20, 30, 100
Cable weight (kg/km)	Approx. 4
Flammability	Complies with the CPR Eca standard.

Mechanical Performance of Cable

Tensile performance (short-term / long-term, N)	50 / 20
Crush (short-term, N/100 mm)	500

Connector Specifications

Connector type	SC/APC
Insertion loss (dB)	≤ 0.3
Return loss (dB)	≥ 60
Pull (N)	20

Fiber Specifications

Fiber mode	Single mode
Fiber type	G.657B3
Fiber count	1
Color	Transparent
Maximum attenuation	1310nm: 0.36 dB/km 1550nm: 0.23 dB/km

Standards

Test standard	ITU-T G.657，IEC 60794-2-50,YD/T 1258.2, IEC 60332-1, YD/T 1272.3, IEC 61754-4, IEC 61755-3-2, DKBA 4509，IEC61753-1, IEC61753-021-3，CPR Dca
RoHS 2.0	Compliant

Huawei Technologies Co., Ltd.

Address:Huawei Industrial Base Bantian, Longgang Shenzhen 518129 People's Republic of China

Website:www.huawei.com