



SC Fast connector



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2011. 09 (Version 2)

Overview

Coming with a pre-installed fiber, our SC fast connector is applicable for 2×3mm bow type drop cable (often called drop cable) in FTTH. This range of field installable connector features easy, quick and stable installation. The assembly tools are simple and it is convenient to carry them around. There is no need of battery for installing, which has high operability. Thus, the SC fast connector effectively assists in improving operating efficiency, which reduces labor cost of FTTH projects.

Product Features

- Alignment in the inner bore of the ceramic ferrule - high precision alignment
- C-shaped groove takes the place of V-shaped groove.
- Ceramic has low thermal coefficient of expansion - working temperature is ranging from -40 °C to +85 °C
- Ceramic has high rigidity - connection point without deformation
- Ceramic has good property—long lifetime
- Easy assembly and high one-time assembly success rate
- High lifetime, easy assembly, high reliability and high return loss
- The quick assembly fiber connector can be assembled and disassembled for many times.
- Super high one-time assembly success rate
- The SC fast connector is made of special material. Fibers alignment is done in the inner bore of the ceramic ferrule and fibers are locked by the locker.

Application

- CATV
- Active device termination
- Telecommunication networks
- Metro
- Local Area Networks (LANs)

- Data processing networks
- Test equipment
- Premise installation
- Wide Area Networks(WANs)

Specifications

Parameter	Specifications
Connector Type	SC,FC,LC(PC or APC)
Matched Optical Cable	2*3mm bow type drop cable (often called drop cable)
Fiber Type	Single mode 9/125 μ m (G657A & G657B or customized)
Fiber Cladding External Diameter	250 μ m
Insertion Loss	Mean value \leq 0.2dB, max. \leq 0.3dB (1,310nm & 1,550nm)
Return Loss	PC: \geq 40dB; APC: \geq 55dB
One-time Assembly Success rate	\geq 97%
Repeatability of Assembly and Disassembly	\geq 5times
Average Assembly Time	\leq 20secnds
Tension	\geq 30N
Lifetime	\geq 30years
Working Temperature	-40 $^{\circ}$ C~+85 $^{\circ}$ C

Reliability Test and Results

No.	Test	Testing Conditions	On-line Testing	Testing Results	Eligibility Requirements	Remark
1	Low Temperature Test	Temperature: -40 $^{\circ}$ C Duration: 96h	IL: \leq 0.1dB RL: \leq 2.0dB	IL: \leq 0.04dB RL: \leq 1.7dB	IL: \leq 0.3dB RL: \leq 0.5dB	No mechanical damage, No deformation and fracture
2	Thermal Cycle Test	Max Temp: Ta= +85 $^{\circ}$ C Mini Temp: Tb=-40 $^{\circ}$ C Cycles: 21 (8h every cycle) 168h in total	RL: \leq 0.1dB IL: \leq 2.0dB	IL: \leq 0.05dB RL: \leq 1.5dB	IL: \leq 0.3dB RL: \leq 5dB	
3	Vibration Test(sine wave)	Frequency Range: 10-50Hz, Sweep Frequency: 45 times/min. Amplitude: 0.75mm; Duration: 2h in every direction including X, Y, Z, directions		IL: \leq 0.05dB RL: \leq 1.3dB	IL: \leq 0.3dB RL: \leq 5dB	No mechanical damage, No deformation and fracture
4	Drop Test	Height Above Ground:0.5m Drop 8 times	/	IL: \leq 0.06dB RL: \leq 1.2dB	IL: \leq 0.3dB RL: \leq 5dB	No mechanical damage, No deformation and fracture
5	High Temperature Test	Temperature: +85 $^{\circ}$ C, Duration: 96h	IL: \leq 0.1dB RL: \leq 3dB	IL: \leq 0.07dB RL: \leq 2.5dB	IL: \leq 0.3dB RL: \leq 5dB	
6	Humidity Test	Temperature:+75 $^{\circ}$ C, Humidity:95%, Duration: 96h	IL: \leq 0.1dB RL: \leq 2.0dB	IL: \leq 0.05dB RL: \leq 1.7dB	IL: \leq 0.3dB RL: \leq 5dB	
7	Pull Test	On-line Load: 20N, Off-line Load: 30N; Duration: 2 minutes, Distance From Connector: 22~28cm	IL: \leq 0.03Db RL: \leq 0.7dB	IL: \leq 0.03dB RL: \leq 0.7dB	IL: \leq 0.3dB RL: \leq 5dB	

8	Twist Test	Load:15N, Distance From Connector: 22~28cm, Rate: 10times/min. Times: 200	/	IL: ≤0.02dB RL: ≤0.4dB	IL: ≤0.3dB RL: ≤5dB	
9	Water Immersion Test	Water Temperature:25±2℃ (tap water), Duration: 168h	/	IL: ≤0.09dB RL: ≤1.4dB	IL: ≤0.3dB RL: ≤5dB	



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