



LC Fast connector



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Overview

As a LC/PC through type suitable for 2×3mm bow type drop cable (frequently called drop cable) in FTTH, our LC fast connector features quick, convenient and stable installation.

As compared with conventional fiber optic connectors, the LC fast connector has advantages that it is field terminated, and can be installed quickly. With a requirement of only simple and portable assembly tools, the field installable connector can be installed with high efficiency and operability. As a result, the construction efficiency is greatly enhanced and meanwhile the labor cost of FTTH is reduced enormously.

Product Features

- Unique metal core structure makes the fast connector work stably under kinds of harsh conditions.
- This quick-assembly fiber connector features visualized, easy and quick operation which costs less than 20 seconds on average.
- Repeated mating can be achieved with constant performance indexes.
- Fiber breaking caused by mis-operation can be fixed easily and quickly.
- Low insertion loss and high return loss
- 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 LC optical connector has a small volume and its overall length is less than 50mm.

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 9/125μm (G657A & G657B or customized)
Fiber Cladding External Diameter	250μm
Insertion Loss	Mean value≤0.2dB, max.≤0.3dB (1,310nm & 1,550nm)
Return Loss	PC:≥40dB; APC:≥55dB
One-time Assembly Success rate	≥97%
Repeatability of Assembly and Disassembly	≥5times
Average Assembly Time	≤20seocnds
Tension	≥30N
Lifetime	≥30years
Working Temperature	-40℃~+85℃

Reliability Test and Results

No.	Test	Testing Conditions	On-line Testing	Testing Results	Eligibility Requirements	Remark
1	Low Temperature Test	Temperature: -40℃ Duration: 96h	IL: ≤0.1dB RL: ≤2.0dB	IL: ≤0.04dB RL: ≤1.7dB	IL: ≤0.3dB RL: ≤0.5dB	No mechanical damage, No deformation and fracture
2	Thermal Cycle Test	Max Temp: Ta= +85℃ Mini Temp: Tb=-40℃ Cycles: 21 (8h every cycle) 168h in total	RL: ≤0.1dB IL: ≤2.0dB	IL: ≤0.05dB RL: ≤1.5dB	IL: ≤0.3dB RL: ≤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: ≤0.05dB RL: ≤1.3dB	IL: ≤0.3dB RL: ≤5dB	No mechanical damage, No deformation and fracture
4	Drop Test	Height Above Ground:0.5m Drop 8 times	/	IL: ≤0.06dB RL: ≤1.2dB	IL: ≤0.3dB RL: ≤5dB	No mechanical damage, No deformation and fracture
5	High Temperature Test	Temperature: +85℃, Duration: 96h	IL: ≤0.1dB RL: ≤3dB	IL: ≤0.07dB RL: ≤2.5dB	IL: ≤0.3dB RL: ≤5dB	
6	Humidity Test	Temperature:+75℃, Humidity:95%, Duration: 96h	IL: ≤0.1dB RL: ≤2.0dB	IL: ≤0.05dB RL: ≤1.7dB	IL: ≤0.3dB RL: ≤5dB	
7	Pull Test	On-line Load: 20N, Off-line Load: 30N; Duration: 2 minutes,	IL: ≤0.03Db RL: ≤0.7dB	IL: ≤0.03dB RL: ≤0.7dB	IL: ≤0.3dB RL: ≤5dB	

		Distance From Connector: 22~28cm				
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	

Important Notice

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