

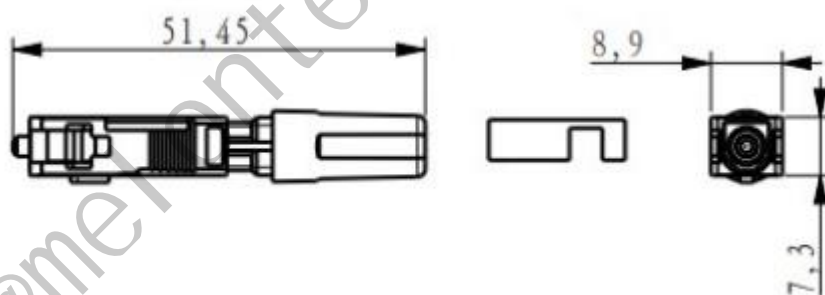
MT-1041-S-A/U

SC Fast Connector



Quick Details:

01. Product Name : SC Fast Connector
02. Place of Origin : China
03. Model No : MT- 1041-S
04. Product Length : 52mm
05. Net Weight : 8g
06. Connector Type: SC/APC or SC/UPC
07. Apply for : FTTH Cable 2*3mm Φ 3.0, Φ 2.0, Φ 0.9
08. Insert Loss (IL) :0.2dB
09. Return Loss (RL) :48dB



Technical Parameter:

Item	Parameters	Remark
Insert Loss (IL)	Typical :0.20dB Max:0.4dB	1310nm&1550nm
Return Loss (RL)	Typical :48dB Max:45dB	1310nm&1550nm
Fiber	SM 9/125um G657A1	
Installation time	<10S (excluding fiber dispose)	
Tensile Strength	>30N	Peak force of cable tension
Reassembly times	10times	
Operating Temperature	-40~+85°C	
Connection cable	Φ 900 μ m, Φ 2.0mm, Φ 3.0mm indoor round cable and 2 x 1.5mm hybrid cable,	

Key Features:

- Linkage structure design, when docking with equipment and joints, the reserved Micro bend remains unchanged
- V-slot structure design, fiber optic docking is stable and reliable
- The core structure: the use of normally closed elastic fastening method, excellent technical indicators
- Easy to operate, fast construction, high installation success rate, long life cycle, easy maintenance in the later period

Description:

This kind of Field Assembly Optical Connector is designed for fast and simple field termination of single fiber, without polishing or epoxy. The Connector is made with precision and high quality Zirconium ferrules and provides a highly reliable connection in most of the network application. The LC type is available with FTTH Cable 2×3mm, Φ3.0, Φ2.0, Φ0.9.

Applications:

- All fiber interconnection
- Telecom Distribution and Local Area Networks; Telecom Distribution and Local Area Networks
- FTTH and FTTX
- Passive optical networks [ATM, WDM, Ethernet]
- Broadband, Cable TV(CATV)

Batch-by-batch inspection of projects, methods, standards and sampling plans:

Items	Methods	Standard				Samples Chosen
Visual Inspection	1. Visual inspection 2. 200 times magnifying glass	1, the surface can not appear obvious scratches, corners, deformation and other defects, product specifications and models and actual compliance. 2. See Table 2.				General inspection level I, AQL 0.04
Geometric Size	CCD projector detection	According to the drawings				General inspection level I, AQL 0.04
End Face Geometry Index	3D detector detection	Part No.	Curvature Radius (mm)	Vertex Shift Amount (μm)	Concavity and Convexity (nm)	General inspection level I, AQL 0.04
		PC Type (Φ2.5mm)	10~25	≤50	-100~+50	General inspection level I, AQL 0.04
		PC Type (Φ1.25mm)	7~25	≤50	-100~+50	
		APC Type (Φ2.5mm)	5~12	≤50	-100~+50	
		APC Type (Φ1.25mm)	5~1	≤50	-100~+50	
Insertion Loss	Loss detector standard line detection method	PC: Average Value: ≤0.2dB, Maximum Value: ≤0.4dB APC: Average Value: ≤0.3 dB, Maximum Value: ≤0.5 dB				General inspection level II, AQL 0.025
Return Loss	Loss detector standard line detection method	PC: ≥ 40 dB, APC: ≥ 55 dB.				General inspection level II, AQL 0.025
Average Assembly Time	Normal skilled operator	≤2.5Mins				General inspection level II, AQL 0.025
One Assembly Success Rate	Normal skilled operator	≥98%				At least 98 per assembly
Repeated Assembly	Normal skilled operator	≥5 Times				Special inspection level S-I level, AQL 1.5

Inspection Area		Judgments Standard			
Area	Range	Scratch	Spot	Bright spots /white spots	Crack
1	Within $\Phi 25\mu\text{m}$	Not Allowed	Not Allowed	Not Allowed	Not Allowed
2	$\Phi 25\mu\text{m} \sim \Phi 60\mu\text{m}$	Width $\leq 1 \mu\text{m}$ Quantity $\leq 2\text{pcs}$	Diameters $\leq 1\mu\text{m}$ Quantity $\leq 2\text{pcs}$	Not Allowed	Not Allowed
3	$\Phi 60\mu\text{m} \sim \Phi 125\mu\text{m}$	Width $\leq 2 \mu\text{m}$ Quantity $\leq 3\text{pcs}$	Diameters $\leq 2\mu\text{m}$ Quantity $\leq 3\text{pcs}$	Not Allowed	Not Allowed

Inspection items, requirements and criteria:

Inspection Item	Inspection Requirements	Judgments Standard
Insertion Loss	Loss detector standard line detection method	PC: average value: $\leq 0.2\text{dB}$, maximum value: $\leq 0.4\text{dB}$, APC: average value: $\leq 0.3 \text{ dB}$, maximum value: $\leq 0.5 \text{ dB}$.
Return Loss	Loss detector standard line detection method	PC: $\geq 40 \text{ dB}$, APC: $\geq 50 \text{ dB}$.
Average Assembly Time	Normal skilled operator	$\leq 2.5\text{Mins}$
One Assembly Success rate	Normal skilled operator	$\geq 98\%$
Repeatability	Insert 10 times	Insertion loss change: $\leq 0.2\text{dB}$, return loss change: $\leq 4\text{dB}$. No mechanical damage, such as deformation, cracks, Chi and other phenomena
High Temperature	$+85^\circ\text{C}$, 96hrs	Insertion loss change: $\leq 0.2\text{dB}$, return loss change: $\leq 4\text{dB}$. No mechanical damage, such as deformation, cracks, Chi and other phenomena
Low Temperature	-45°C , 96hrs	Insertion loss change: $\leq 0.2\text{dB}$, return loss change: $\leq 4\text{dB}$. No mechanical damage, such as deformation, cracks, Chi and other phenomena
Warm Cycle	$-40^\circ\text{C} \sim +85^\circ\text{C}$, 30 cycles, a total of 240hrs	Insertion loss change: $\leq 0.2\text{dB}$, return loss change: $\leq 4\text{dB}$. No mechanical damage, such as deformation, cracks, Chi and other phenomena
Damp Heat	$+75^\circ\text{C}$, 95%, 96hrs	Insertion loss change: $\leq 0.2\text{dB}$, return loss change: $\leq 4\text{dB}$. No mechanical damage, such as deformation, cracks, Chi and other phenomena
Soaking Water	$25 \pm 2^\circ\text{C}$, 168hrs, tap water	Insertion loss change: $\leq 0.2\text{dB}$, return loss change: $\leq 4\text{dB}$. No mechanical damage, such as deformation, cracks, Chi and other phenomena
Repeated Assembly	Assembly Times: 5 Times	Insertion loss change: $\leq 0.2\text{dB}$, return loss change: $\leq 4\text{dB}$. No mechanical damage, no obvious scratches on the surface of the pin.
Vibration (Sine)	Frequency: 10-50Hz Sweep: 45 times per minute Amplitude: 0.75mm single amplitude Time: three directions, each 2hrs	Insertion loss change: $\leq 0.2\text{dB}$, return loss change: $\leq 4\text{dB}$. No mechanical damage, no obvious scratches on the surface of the pin.
Fall Test	Height: 1.5m No. of times: 8 times	Insertion loss change: $\leq 0.2\text{dB}$, return loss change: $\leq 4\text{dB}$. No mechanical damage, such as deformation, cracks, Chi and other phenomena
Mechanical Durability	Plug and Pull > 500 Times	Insertion loss change: $\leq 0.2\text{dB}$, return loss change: $\leq 4\text{dB}$. No mechanical damage, such as deformation, cracks, Chi and other phenomena.
Tensile	Cable Type: 20N, online measurement; Cable Type: 30N, not measured online, the time is 2 minutes.	Insertion loss change: $\leq 0.2\text{dB}$, return loss change: $\leq 4\text{dB}$. No mechanical damage, such as deformation, cracks, Chi and other phenomena.
Torsion (optical cable type)	Load: 15N Rate: 10 times / min No. of times: 200 times	Insertion loss change: $\leq 0.2\text{dB}$, return loss change: $\leq 4\text{dB}$. No mechanical damage, such as deformation, cracks, Chi and other phenomena.

You may interested:

