



Specification for QSC60K2-APC/UPC Field Installable Connector (FIC Type 60-2)



Prepared by	Reviewed by	Approved by
Liu Jian	Liu Hongyu	Huang Xiaoyu

Revision List

Revise Date	Author	Document Rev.	Modification Record
2019-05-10	Liu Jian	V1.0	First writing
2020-2-12	Liu Hongyu	V2.0	Add more detailed description & modify format
2022-08-12	Liu Hongyu	V2.0A	Update LOGO

Chongqing Lixun Communication Device Co., Ltd.

<http://www.lxftth.com>

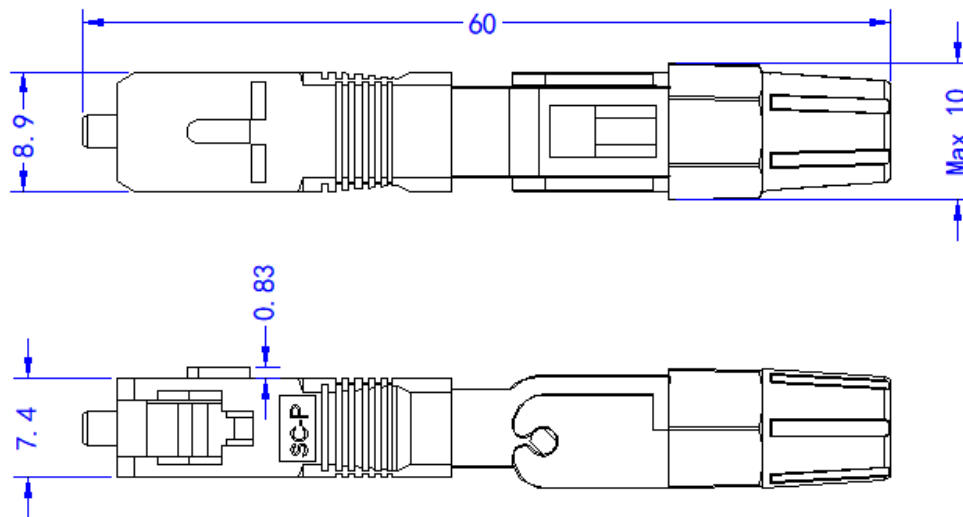


1. Description

This specification defines the characteristics of APC/UPC/MM Field Installable Connector (FIC Type 60-2) with G657A/G652D/MM fiber in a pre-polished SC ferrule. This FIC is produced by Chongqing Lixun Communication Device Co., Ltd. which is designed to be used with butterfly drop cable of 3.0mmx2.0mm dimension and 3.0mm patch cable.

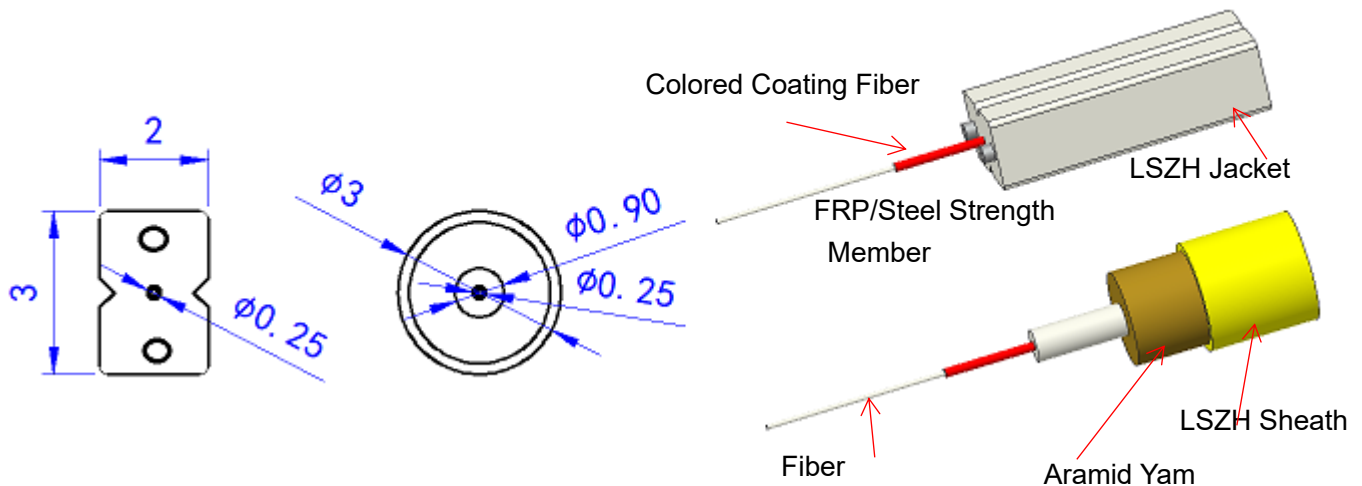
2. Outline Drawing of FIC

The outline of the FIC is as follows:



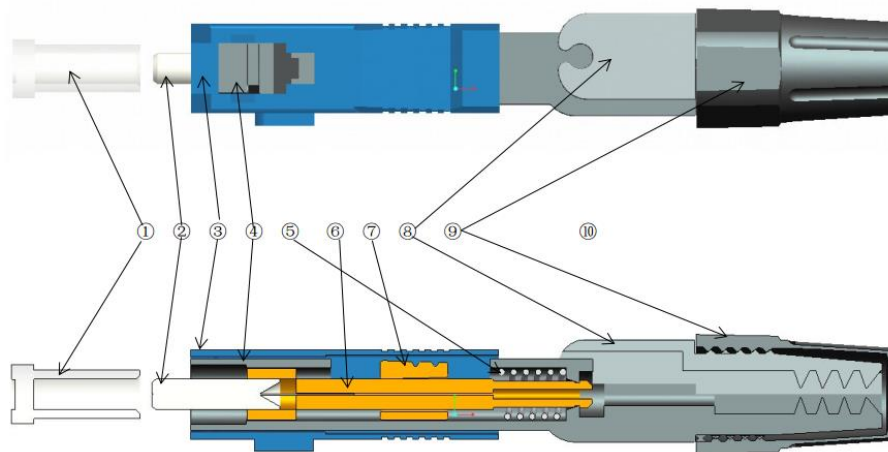
3. Outline Drawing of Cables

The outline of the fitted butterfly flat drop cable and 3.0mm simplex cable are as follows:



4. Construction:

The FIC comprises several parts as shown in the following drawing

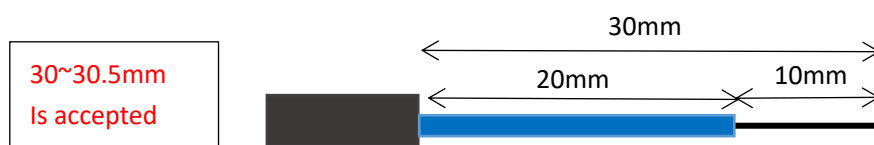


BOM		
No.	Item	Description
①	Dust cap	PE, UPC white/translucent, APC: green, Multi mode: white/translucent
②	SC ferrule	Zirconia ceramics, SC 0.5Concentricity and embedded fiber
③	SC case	PBT, UPC blue, APC green, Multi mode: gray
④	Main housing	Zirconia ceramics
⑤	Spring	SUS304
⑥⑦⑧	V-set	PEI, V-groove, cover, lock
⑨	End flip	PBT/PC, Black
⑩	Screw cap	PBT/PC, Black

It is acceptable for customer to label their company logo or name, etc., by laser marking on the surface of FIC. It is also negotiable to change the color of FIC per customer's request. The standard color of main body of FIC is Black.

5. Fiber length

The length guide is a specially designed tool to help user to strip the fiber coating to the preset length. It has a ruler on itself to help user to strip to preset length effectively.



0.250mm Primary Coating: 20mm, and 0.125mm Bare Fiber: 10 mm

6. Overall Performance

The FIC fulfills the following spec. and insertion loss is tested 100%.

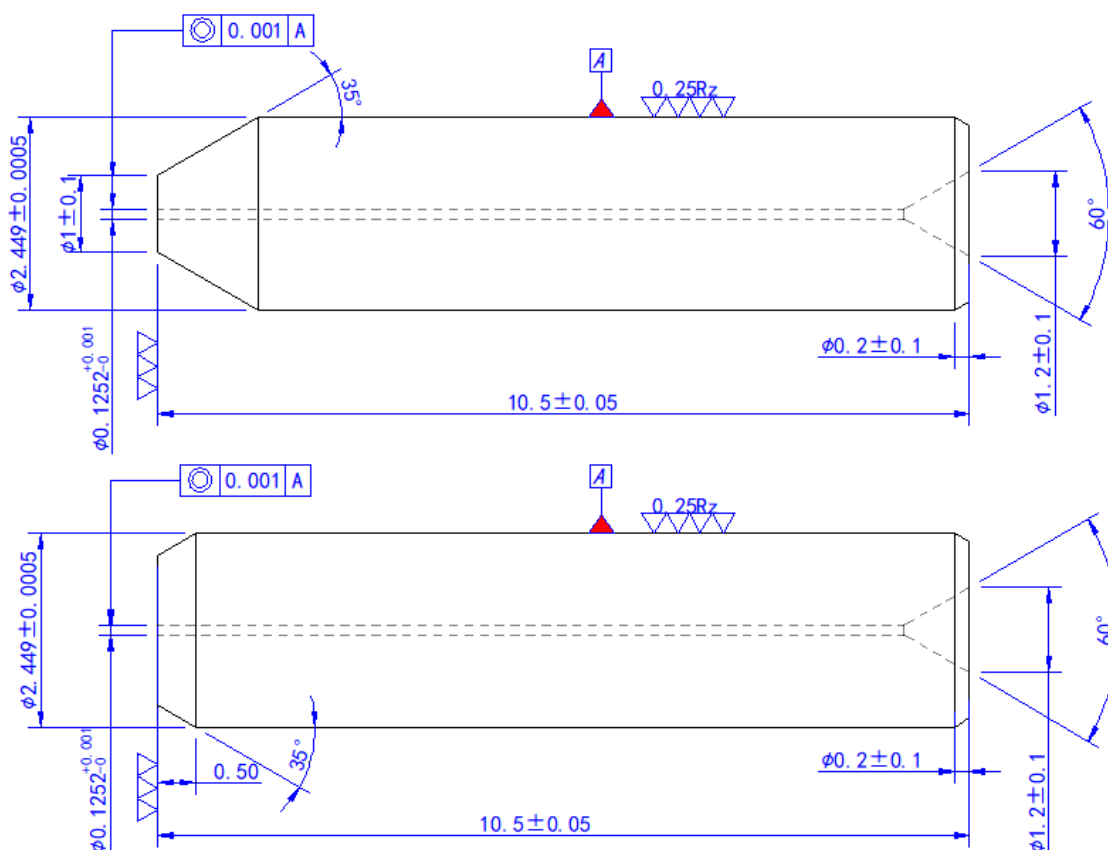
No.	Item Name	Description
1	Insertion Loss (dB)	Max.≤0.5dB, Typical≤0.3dB
2	Return Loss (dB)	UPC: Max. ≤-40dB, Typical≤-45~50dB, APC: Max. ≤-45dB, Typical≤-50~55dB
3	Ferrule End Face	A Zone no scratches at 400X
4	3D Interferometry	Complies to IEC 2009
5	Average Assembling Time	≤ 3 min
6	First-Time Done Yield Rate	≥ 95%
7	Re-Operation Times	Max. 5 times
8	Repeatability (±0.2dB)	≥ 90%
9	Appearance	No Defects
10	Tensile Strength	>50N



6.1 Polished connector surface

Class A Endface Test (400x)			File No.	WI-P3-02
			Page	Page 1 (Total 1 Page)
Client	Applicable Range	Product Type	Procedure	
All	SC/LC Endface	UPC/APC	Connector Endface Test	
			Detailed requirement (can be customized)	
			Zone	Acceptable characteristic
			Type	Size
			Quantity	Unacceptable characteristic
			A	Any defects such as visible dirty, fragment concave, scratch are not allowable
			B	Scratch <2um width 2pcs Other unerasable defects <5um width 3pcs
			C	Scratch <5um width 1pcs Other unerasable defects <10um few pcs
			D	Scratch --- Other unerasable defects: ≤30um 5pcs
			Remarks: 1. Special requirements: Can be customized 2. Environment production requirements: No hazardous wastes is generated during production. 3. Safety requirements: Work protection is required during production process, etc. 4. Related files: Work instructions on Endface Test.	
By Liu Jian		Inspect: Liu Hongyu		Approval: Huang Xiayu
Date: 2020-10-11		Date: 2020-10-11		Date: 2020-10-11

6. Material – Zirconia APC Ferrule





The conical type, Zirconia MM ferrule used in FIC shall meet the following dimensions or with better performance than the drawing here.

8. Material – FIC Housing, Shells, and Dust Cap, all plastics

The FIC shall adopt engineered resin that meet the demand of RoHS and could withstand the temperature changes of the spec. Values.

9. Material – Matching Gel

The matching gel in FIC is well enough for 5-time re-operation in the field. The gel should also meet the RoHS requirement and providing superior optical performance.



10. Working Conditions

The FIC could be operated normally during the following environmental conditions:


Operating Temperature	-20°C~+75°C
Storage Temperature	-40°C~+85°C

11. Packing

1) Every 10pcs in a blister box, and 10 blister boxes are packed in the inner box, then 10 inner boxes are packed in a carton.

		Blister Size (cm)	14.7x7x1.5
		Q'ty (pcs/blister)	10
		N.W. (g/pcs)	3.2
		Inner box size (cm)	15x12x7.6
		Inner box Q'ty (pcs)	100

2) 1,000pcs in an outer carton (10 inner boxes per carton)

	Size(cm)	40x16.3x24.8
	Q'ty (blister box)	100
	Q'ty (pcs/outer carton)	1000
	N.W. (kg/outer carton)	3.2
	G.W. (kg/outer carton)	4.95

The package contains: products, process instruction, and agreed proportion of guide tool.

12. Warranty

If defective products are found and could be proved to be the responsibility of QingYing, then all the defectives will be replaced free of charge, within 1 month.

13. Product drawing:

