



Specification for

QSC53KJ5-APC QSC53KJ5-UPC

Field Installable Connector (Type 53-5)



Prepared by	Proofread by	Approved by
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Revision List

Revise Date	Author	Document Rev.	Modification Record
2020-05-10	Zeng Xiaoyuan	V1.0	First writing
2021-8-4	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

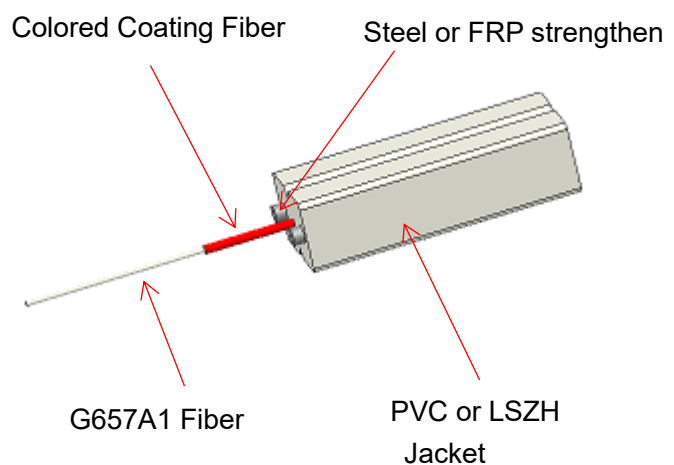
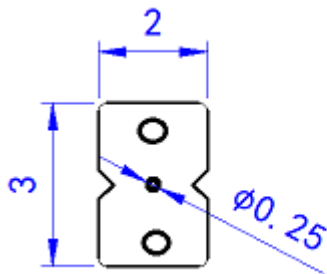
This specification defines the characteristics of SC/UPC, SC/APC Field Installable Connector (FIC Type SC53-5) with G652D/G657A1/G657A2 fiber in a pre-polished SC ferrule (UPC or APC). This FIC is produced by Chongqing Lixun Communication Device Co., Ltd. which is designed to be used with drop cable of 3.0mmx2.0mm dimension.

2. Outline Drawing of FIC

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3. Outline Drawing of Cables

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



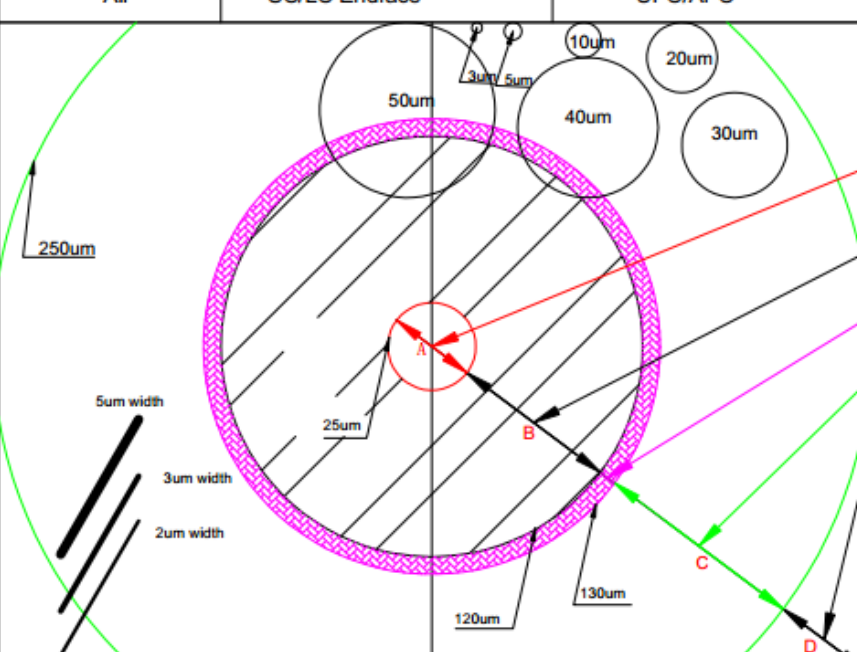
4. Overall Performance

The FIC fulfills the following spec. and Insertion Loss is tested 100%. The return loss is produced to be as low as APC:-55dB, UPC:45dB, so the FIC could bring lowest disturbance to the FTTx system.

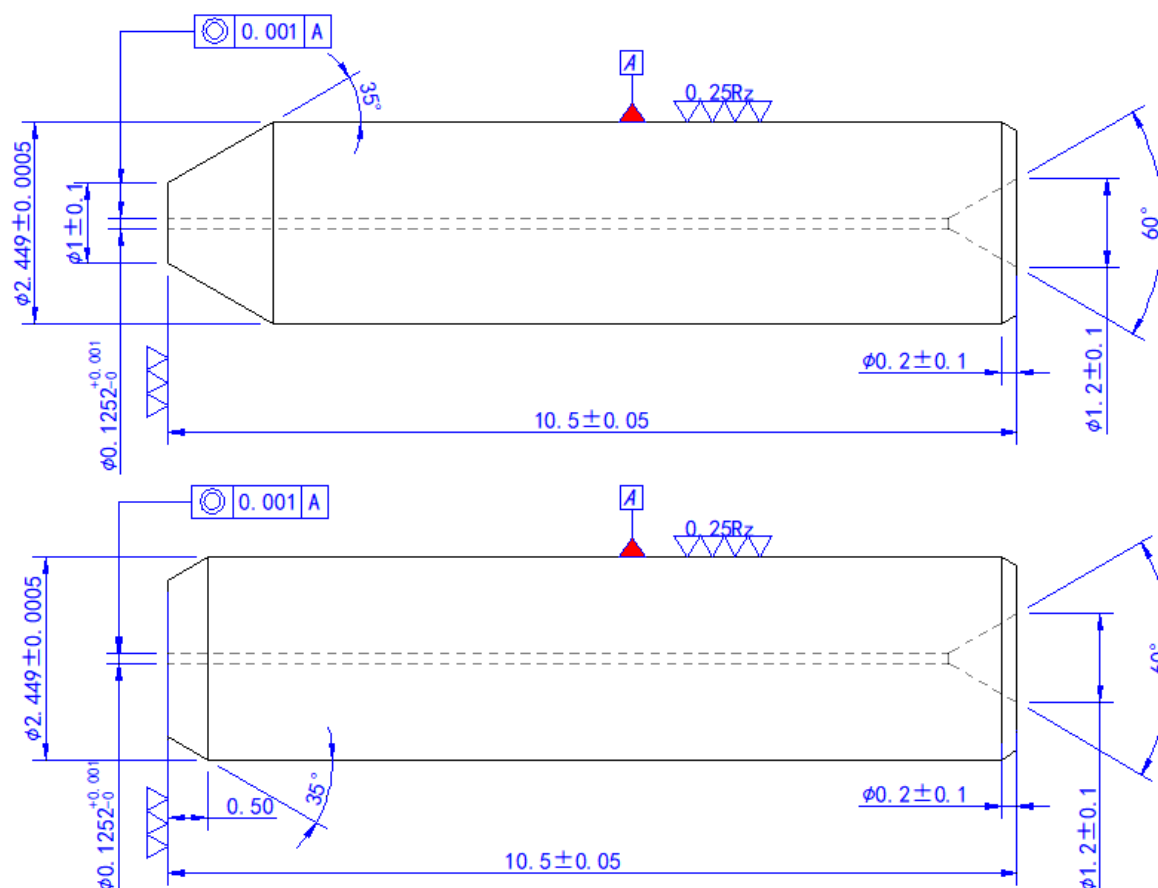
No.	Item Name	Description
1	Insertion Loss (dB)	Max.≤0.5dB, Typical≤0.3dB
2	Return Loss (dB)	Max.APC≤-50dB, Typical≤-55dB Max UPC≤-40dB, Typical≤-45dB
3	Ferrule End Face	A Zone no scratches at 400X
4	3D Interferometry	Complies to IEC 2009
5	Average Assembling Time	≤ 3 min
6	First-Time Done Yield Rate	≥ 95%
7	Re-Operation Times	Max. 5 times
8	Repeatability (±0.2dB)	≥ 90%
9	Appearance	No Defects
10	Tensile Strength	>30N

5. 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			Unacceptable characteristic
				Type	Size	Quantity		
				A	Any defects such as visible dirty, fragment concave, scratch are not allowable			
				B	Scratch	<2um width	2pcs	Fracture
					Other unerasable defects	<5um width	3pcs	
				Glue circle	No requirement, Not control			
				C	Scratch	<5um width	1pcs	Fracture
					Other unerasable defects	<10um	few pcs	
				D	Scratch	---	---	Fracture
					Other unerasable defects:	≤30um 30-50um	--- 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 UPC/APC Ferrule





The conical type, Zirconia UPC/APC ferrule used in FIC shall meet the dimension and performance of GR-326.

6. Material – FIC Housing & Dust Cap

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

7. Material – Matching Gel

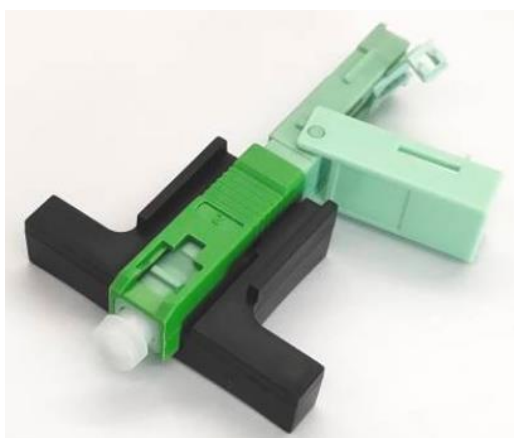
The matching gel in FIC is well enough for 5-time re-operation in the field. The gel should also meet the RoHS requirement and providing superior optical performance

8. Working Conditions

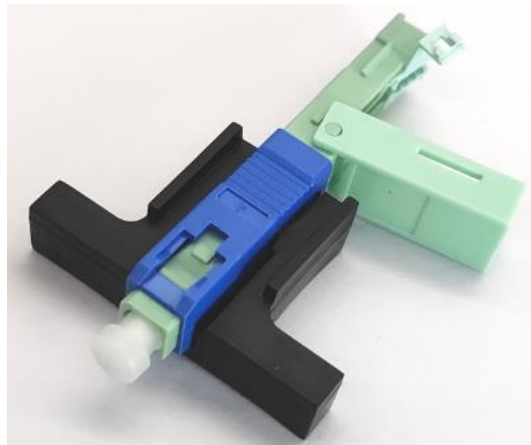
The FIC could be operated normally during the following environmental conditions:

Item Name	Spec. Value
Operating Temperature	-20°C~+75°C
Storage Temperature	-40°C~+85°C

9. Product Appearance



APC: SC housing Green



UPC: SC housing blue



9. Product Drawing

