



Specification for

QSC50KJ4-APC QSC50KJ4-UPC

For 3.0x2.0 drop cable

Field Installable Connector (Type 50-4)



Prepared by	Reviewed by	Approved by
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Revision List

Revise Date	Author	Document Rev.	Modification Record
2019-05-10	Liu Jian	V1.0	First writing
2020-12-21	Liu Jian	V2.0	Add more detailed description & modify format
2021-07-09	Liu Hongyu	V2.0A	Add 2.0x1.6mm drop cable teeth extend

Dongguang Qingying Industry Co., Ltd.

<http://www.qyftth.com>

www.qyfiber.en.alibaba.com

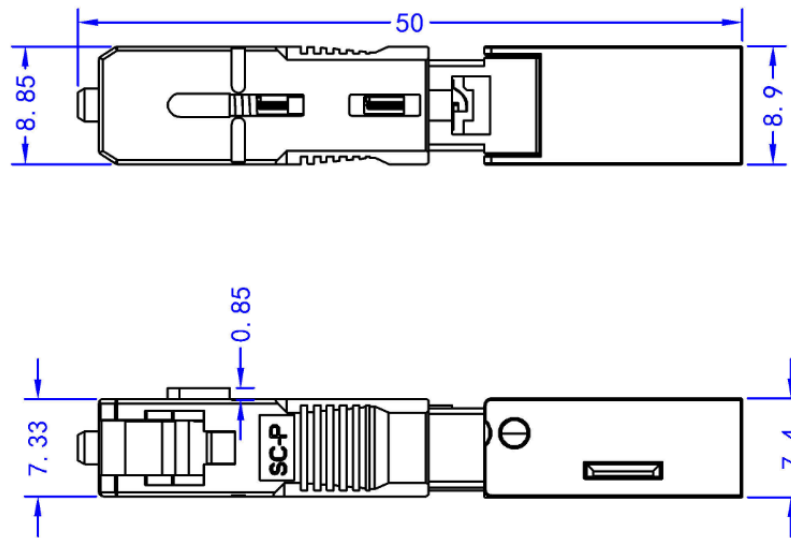


1. Description

This specification defines the characteristics of SC UPC/APC Field Installable Connector (FIC Type 50-4) with G652D/G657A1/G657A2 fiber in a pre-polished SC UPC/APC ferrule. This FIC is produced by Dongguan QingYing Industry Co., Ltd. which is designed to be used with butterfly drop cable of 3.0mmx2.0mm dimension.

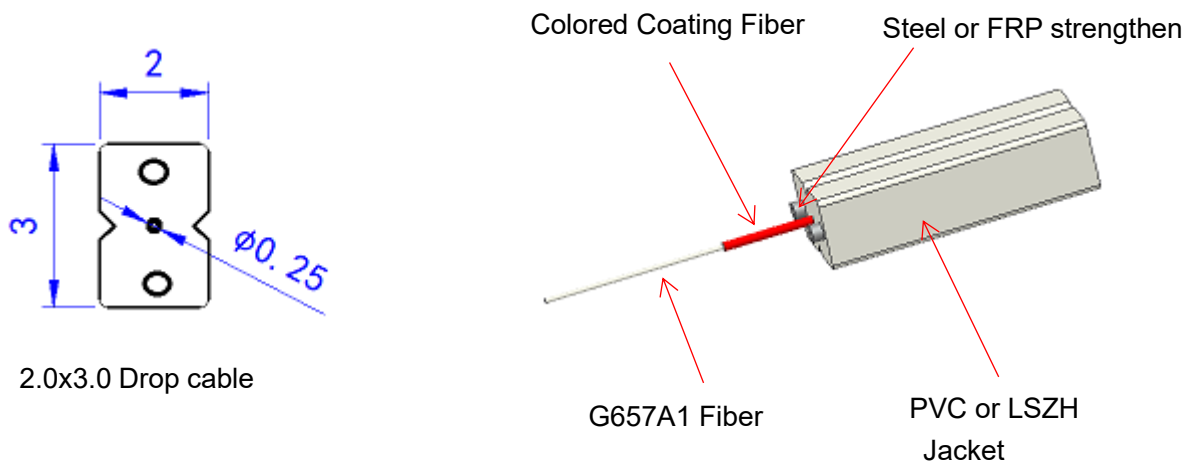
2. Outline Drawing of FIC

The outline of the FIC is as follows:



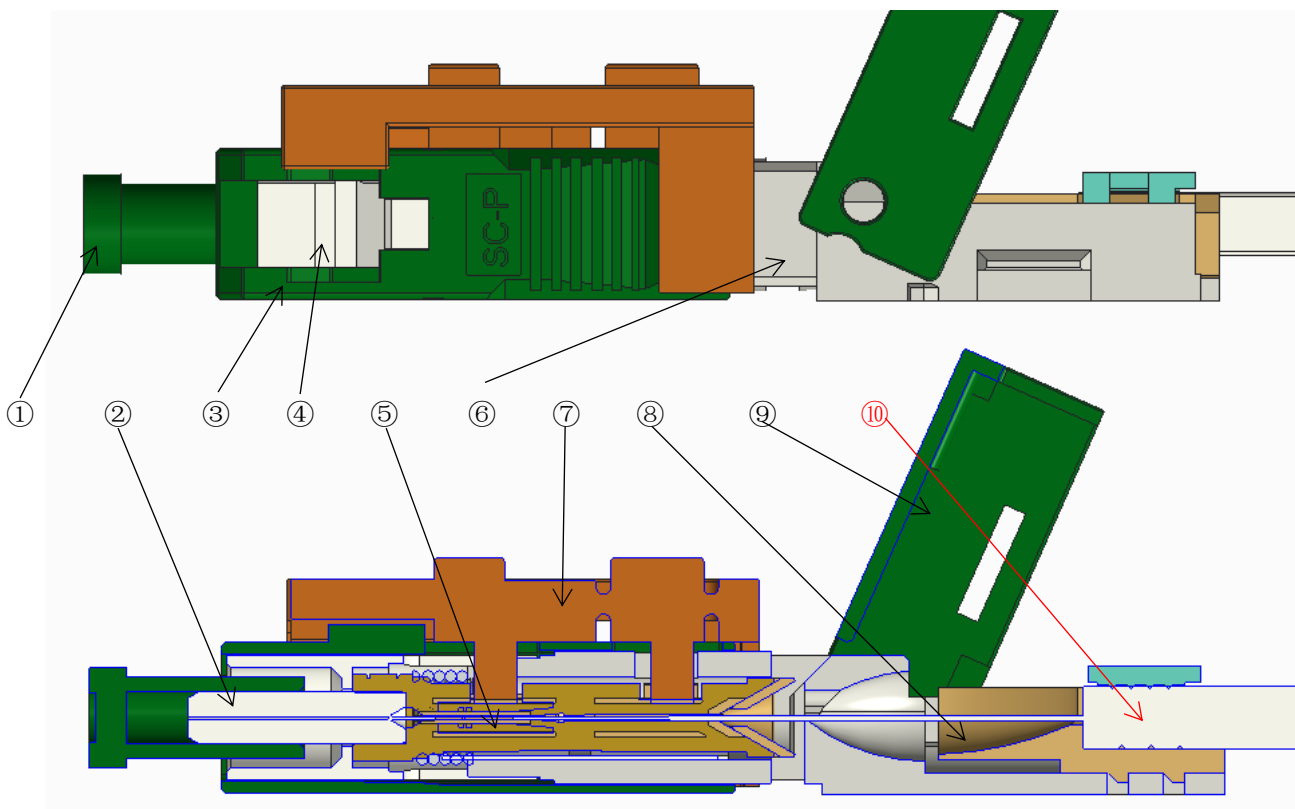
3. Outline Drawing of Cables

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



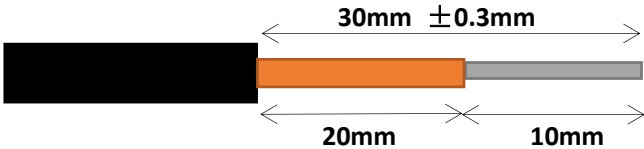
Bill of materials

Part No.	Part name	Description
①	Dust cap	PE, UPC: Transparent, APC: Green
②	Pre-polished ferrule	Zirconia ceramic, embedding with G657A1/G657A2/G62D/MM fiber as ordered
③	SC Housing	PBT/PC, UPC: Blue, APC: Green
④	SC white shell	PBT/PC
⑤	V-groove set	PEI, with V-groove, Cover, U Spring (Beryllium copper), Spring (SUS304)
⑥	Main shell	PBT/PC, White
⑦	Key	PBT/PC, Brown
⑧	Cable lock	PBT/PC, Yellow
⑨	Flap	PBT/PC, UPC: Blue, APC: Green

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 Green/Blue.


5. Fiber length

The Length guide is the same for Optical Fiber Splicing Machine, and use the following ruler to make correct length:




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


<How to Use>——Detailed procession please check assembly instruction page




Plastic knife strip fiber coating, the guide's back side



Put fiber in cable locker, the guide's front side



Cleave fiber



Push cable locker in



The FIC fulfills the following spec. and Insertion Loss is tested 100%. The return loss is produced to be almost as low as patch cord, 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	5 times
8	Repeatability (±0.2dB)	≥ 90%
9	Appearance	No Defects
10	Tensile Strength	>25N

Class A Endface Test (200x)		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) Acceptable characteristic				
			Zone	Type	Size	Quantity	Unacceptable characteristic
			A	Any defects such as visible dirty, fragment concave, scratch are not allowable			
			B	Scratch	<2um width	2pcs	Fracture
				Other unerasurable defects	<5um width	3pcs	
			C	Glue circle No requirement, Not control			
D	Scratch	<5um width	1pcs	Long Fracture			
	Other unerasurable defects	<10um	few pcs				
E	Scratch	---	---	Long Fracture			
	Other unerasurable 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 Xiaoyu				
Date: 2020-10-11		Date: 2020-10-11	Date: 2020-10-11				

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



9. Material – Matching Gel

10. Working Conditions

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

11. Packing


1) 5pcs in a small blister box



Blister Size (cm)	12x9.5x1.5
Q'ty (pcs/blister)	5
Inner carton size(cm)	15.5*12.2*10.2
Q'ty (blister/inner carton)	10
Q'ty (pcs/inner carton)	50
N.W. (g/each FIC)	4.31



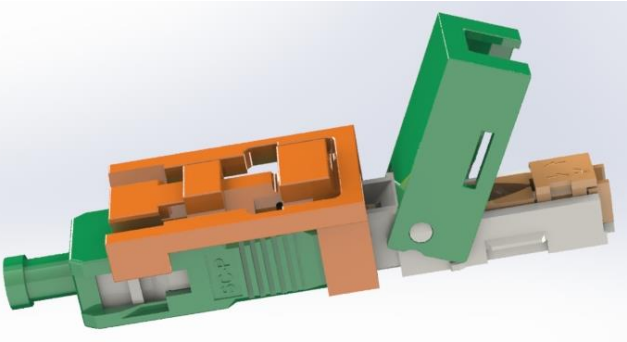
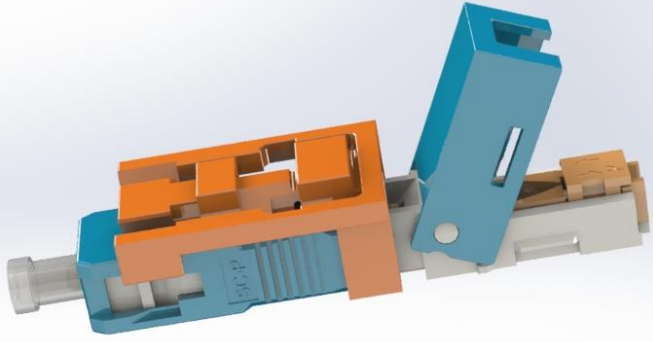
2) 1,000pcs in a big carton

	Outer Carton Size(cm)	53.5*26*32.2
	Q'ty (inner box/outer carton)	20
	Q'ty (pcs/ outer carton)	1000
	N.W. (kg/outer carton)	4.31
	G.W. (kg/outer carton)	6.3

12. Warranty

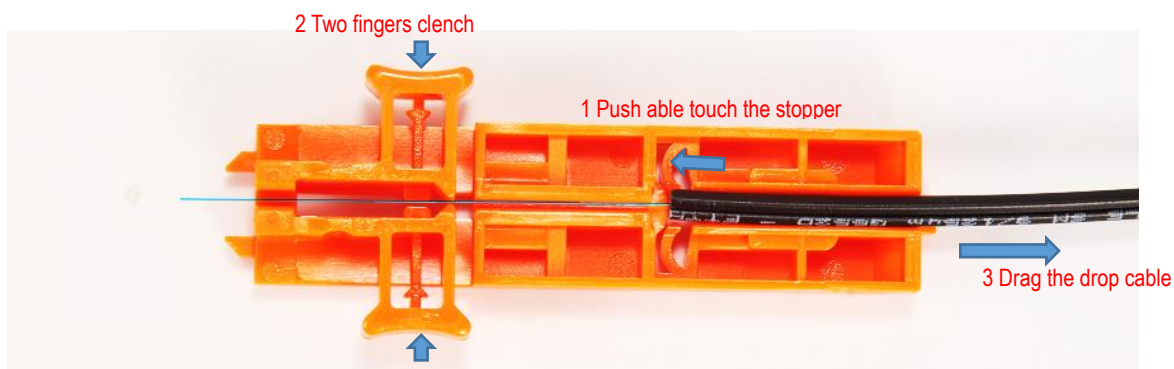
If defective products are found and could be proved to be the responsibility of QingYing, then all the defectives will be replaced free of charge, within 1 month.

13. Product appearance

	
APC: Green	UPC: Blue

14. Updated information:

The Length guide updated to: Back side plastic knife to strip fiber coating, so the glass surface of fiber will never got hurt. It improved the FIC's reliability very much.

**15. Product drawing:**

