

Specification & Data sheet

RF Coaxial Connector **C8X Series**



Q4, 2015
Version 1.0

Description:

RF Micro Coaxial Connector is for high frequency transmission between RF module and antenna.

Application:

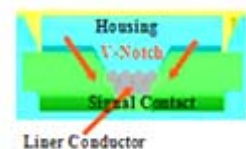
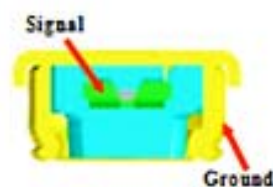
- Be used to connect antenna with wireless communications module such as Notebook 、 PDA 、 Mobile Phone 、 GPS 、 Bluetooth etc.
- Board mount type (Receptacle) is usually provided to WLAN module manufacturing.
- Cable assembly (Plug) is usually provided to antenna manufacturing.

Feature & Benefit:

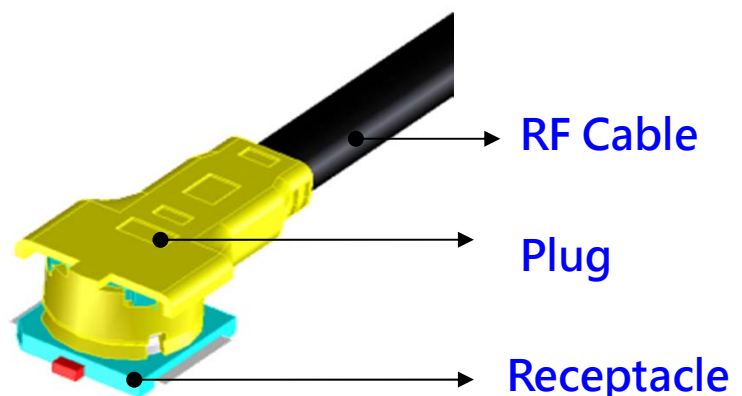
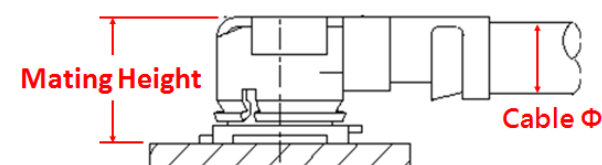
- Compatible with mainstream connector in the field.
- Used for high frequency up to 6GHz.
- Meet RoHS, HF, PFOS standards

Patent Information:

Plug: Signal Pin V-Notch



Product Application:



Ordering Information:

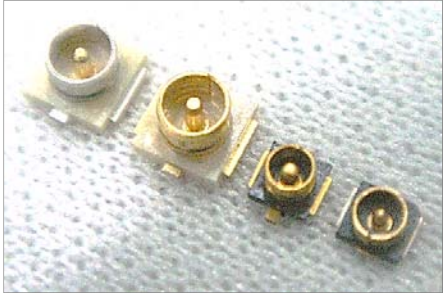
Series.	RF 1代		RF 2代	RF 3代	RF 4代			RF 5代
Mating Height	2.5 mm		2.0 mm	1.6 mm	1.2 mm	1.2 mm	1.4 mm	1.0 mm
Cable O.D mm	1.13	1.37	0.81	0.81 0.64		0.81 0.64	1.13	0.81 0.64

SpeedTech	Type	C85			C84	C89 (I)	C89 (II)	C87 (I)	C87 (II)	C81
	Plug	C85P101	C85P107	C85P104	C84P101	C89P106	C89P130	C87P112	C87P115	C81P102
	Receptacle	C88P132				C89P104	C89P119	C87P101		C81P101
I-PEX	Type	MHF I			MHF II	MHF III	N/A	MHF 4	MHF 4	MHF 5
	Plug	20278-1*2R 20308-1*2R	N/A	20351-1*2R	20311-001R 20312-011R	20367-001R		20572-001R	20565-001R	20567-001R 20615-001R
	Receptacle	20279-001E 20441-001E-01				20369-001E		20449-001E 20579-001E		20566-001E
HRS	Type	U.FL				▲ W.FL	W.FL2			

Type	Plug P/N:	Receptacle P/N:	RF Cable Cable O.D (mm)				Mating Height	Competitor
			1.37	1.13	0.81	0.64		
RF 1代	C85P101	C88P132 (3.0×3.0×1.25mm)					2.50 mm	IPEX-MHF 1 & HRS-U.FL
	C85P107						2.50 mm	
	C85P104						2.50 mm	
RF 2代	C84P101						2.00 mm	IPEX-MHF 2 & HRS-U.FL
RF 3代	C89P106	C89P104 (2.0×2.0×0.85mm)					1.60 mm	IPEX-MHF 3
RF 4代	C89P130	C89P119 (2.0×2.0×0.70mm)					1.20 mm	HRS-W.FL2
RF 4代	C87P112	C87P101 (2.0×2.0×0.6mm)					1.20 mm	IPEX-MHF 4
	C87P115						1.40 mm	IPEX-MHF 4
RF 5代	C81P102	C81P101 (2.0×2.0×0.56mm)					1.00 mm	IPEX-MHF 5



Plug



Receptacle



RF Cable

Meet PCI Express M.2 Specification For C87 Series

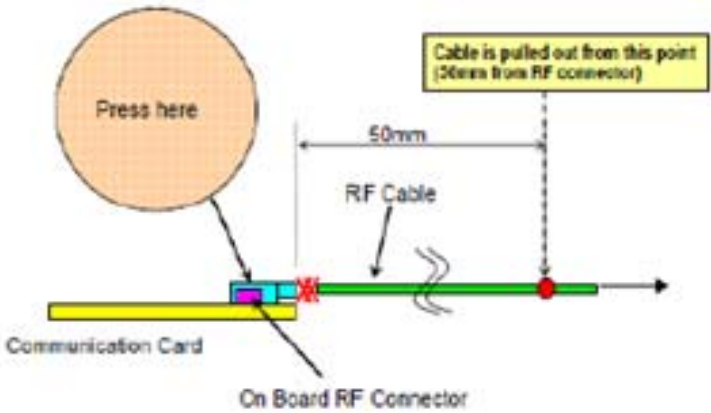
Description	Standard Requirement	Improved Requirement
Mating force	30 N maximum	
Un-mating force	5 N initial, 3 N minimum after 30 cycles, 20 N maximum	
Cable Retention at 0 Degree Pull (Parallel to PCB)	5 N min	20 N min (Ø1.13mm wire) 10 N min (Ø0.81mm wire)
Cable Retention at 30 Degree Pull (PCB to Cable Angle)	Not Recommended	10 N min
Durability (# of mating cycles)	30 cycles (Contact Resistance-20 mΩ)	
Receptacle Shearing Strength	20 N min	
Vibration	No momentary disconnections of 1 micro-sec/min	

Cable Retention Force

- TEST EQUIPMENT/ (DATE OF LATEST CALIBRATION) :
MATERIALS TESTING SYSTEM: INSTRON 4442 (CAL. DATE: SEP. 06, 2012)
- TEST METHOD OF INSPECTION

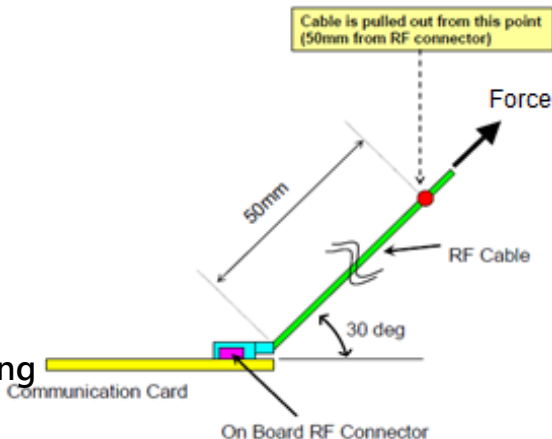
Plug P/N: C87P112

- Micro Connector (Plug)
- RF Cable
- Micro Connector Plug Cable 0.81 Contact
- Cable Retention Force: 10N min.



Plug P/N: C87P115

- Micro Connector (Plug)
- RF Cable
- Micro Connector Plug Cable 1.13 Contact
- Cable Retention Force: : 20N min.

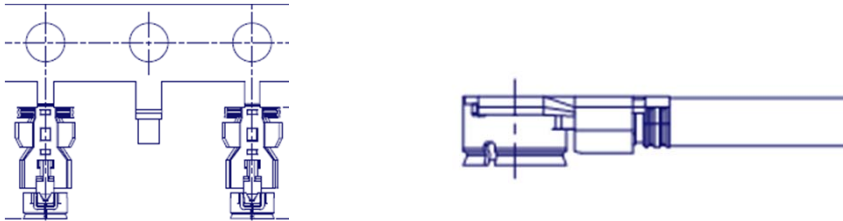


RF Cable

- Micro Connector Plug Cable 0.81 & 1.13 Contact
- No electrical discontinuity greater than 1µs after pulling the cable 10 times by 10N force

Graphic : (RF 1 & 2 代)

Plug (RF Cable)

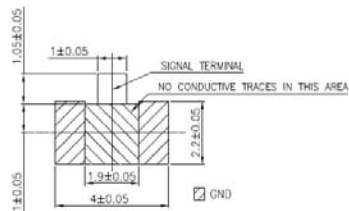
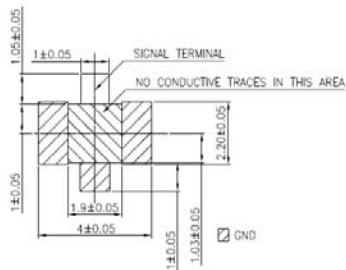
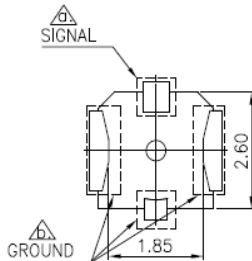
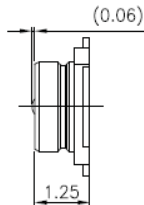
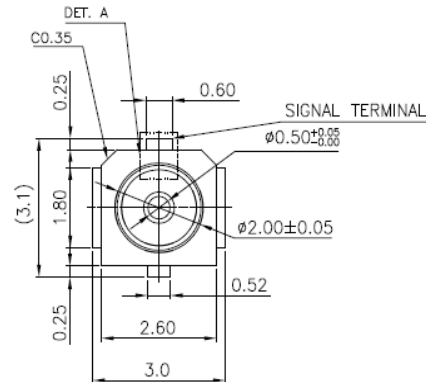


C85P101	C85P104	C84P101

Receptacle : C88P132
3.0 x 3.0 x 1.25 mm



Type	Plug P/N:	Receptacle P/N:	RF Cable Cable O.D (mm)				Mating Height
			1.37	1.13	0.81	0.64	
RF 1代	C85P101	C88P132 (3.0×3.0×1.25mm)					2.50 mm
	C85P104						2.50 mm
RF 2代	C84P101						2.00 mm

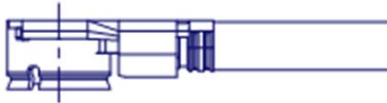
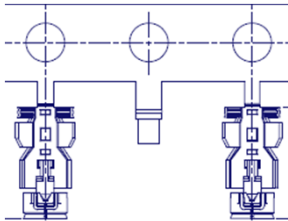


RECOMMENDED PCB MOUNTING PATTERN FOR 4 PAD
THE MOUNTING PATTERN AND METAL MASK RATIO IS 1:1
(MASK THICKNESS 0.10/0.12mm)

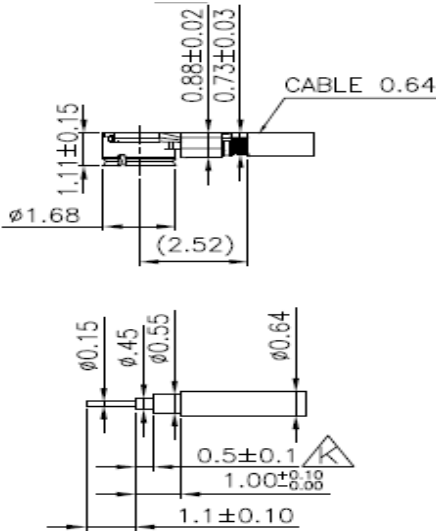
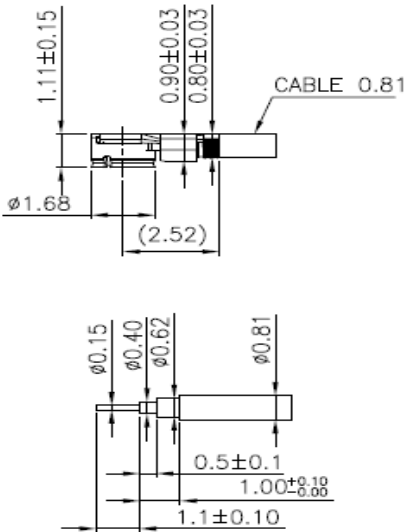
RECOMMENDED PCB MOUNTING PATTERN FOR 3 PAD
THE MOUNTING PATTERN AND METAL MASK RATIO IS 1:1
(MASK THICKNESS 0.10/0.12mm)

Graphic : (RF 3代)

Plug (RF Cable)



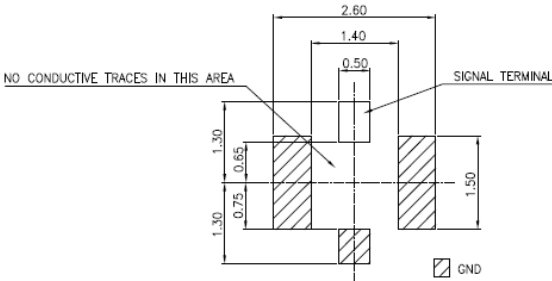
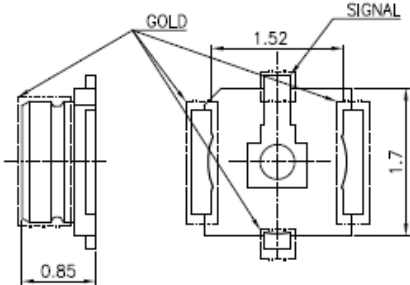
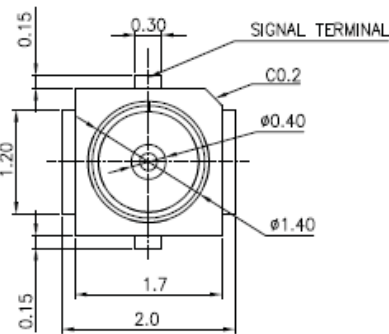
C89P106



Receptacle : C89P104
2.0 x 2.0 x 0.85 mm

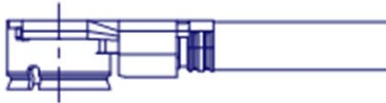
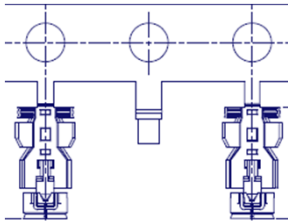


Type	Plug P/N:	Receptacle P/N:	RF Cable Cable O.D (mm)				Mating Height
			1.37	1.13	0.81	0.64	
RF 3代	C89P106	C89P104 (2.0×2.0×0.85mm)					1.60 mm

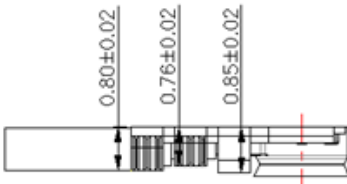


Graphic : (RF 4代)
Competitor HRS- W.FL2

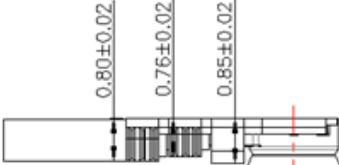
Plug (RF Cable)



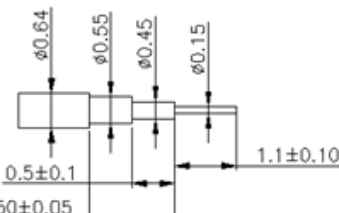
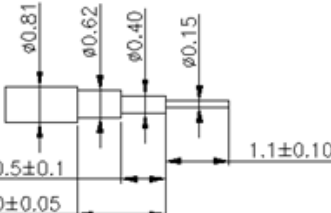
C89P130



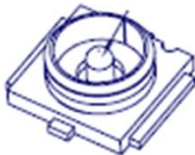
銅線尺寸



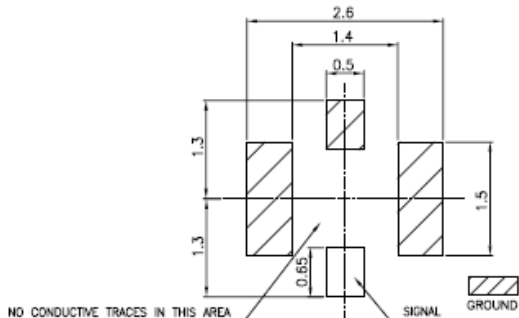
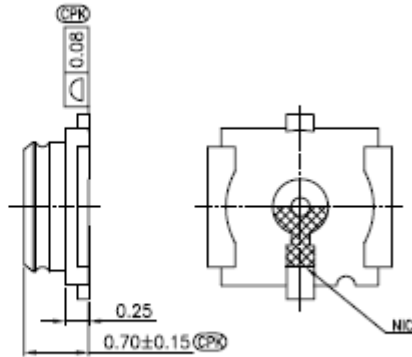
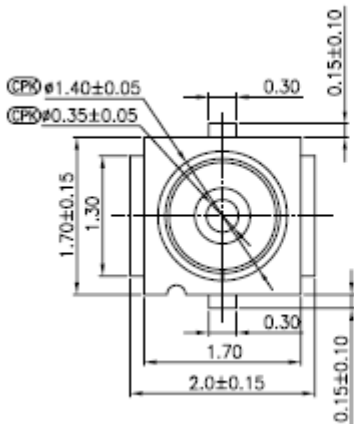
銅線尺寸



Receptacle : C89P119
2.0 x 2.0 x 0.7 mm



Type	Plug P/N:	Receptacle P/N:	RF Cable Cable O.D (mm)				Mating Height
			1.37	1.13	0.81	0.64	
RF 4代	C89P130	C89P119 (2.0×2.0×0.70mm)					1.20 mm

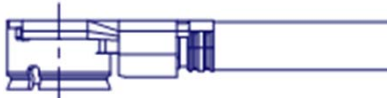
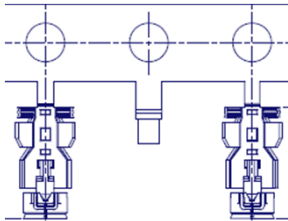


NO CONDUCTIVE TRACES IN THIS AREA

RECOMMENDED PCB MOUNTING PATTERN
THE MOUNTING PATTERN AND METAL MASK RATIO IS 1:1
(MASK THICKNESS 0.10/0.12mm)

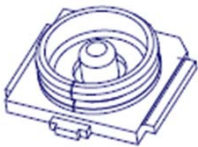
Graphic : (RF 4代)

Plug (RF Cable)

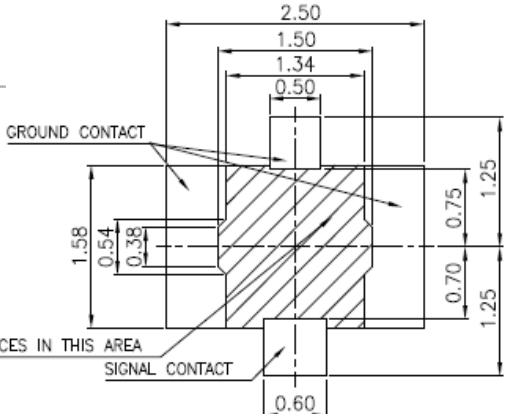
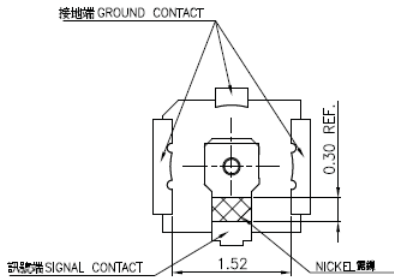
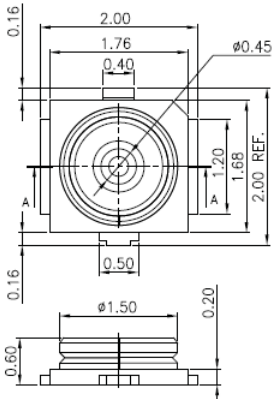


C87P112		C87P115

Receptacle : C87P101
2.0 x 2.0 x 0.6 mm

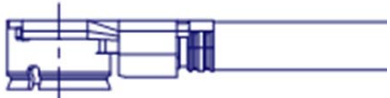
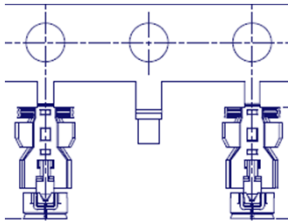


Type	Plug P/N:	Receptacle P/N:	RF Cable Cable O.D (mm)				Mating Height
			1.37	1.13	0.81	0.64	
RF 4代	C87P112	C87P101 (2.0×2.0×0.6mm)					1.20 mm
	C87P115						1.40 mm

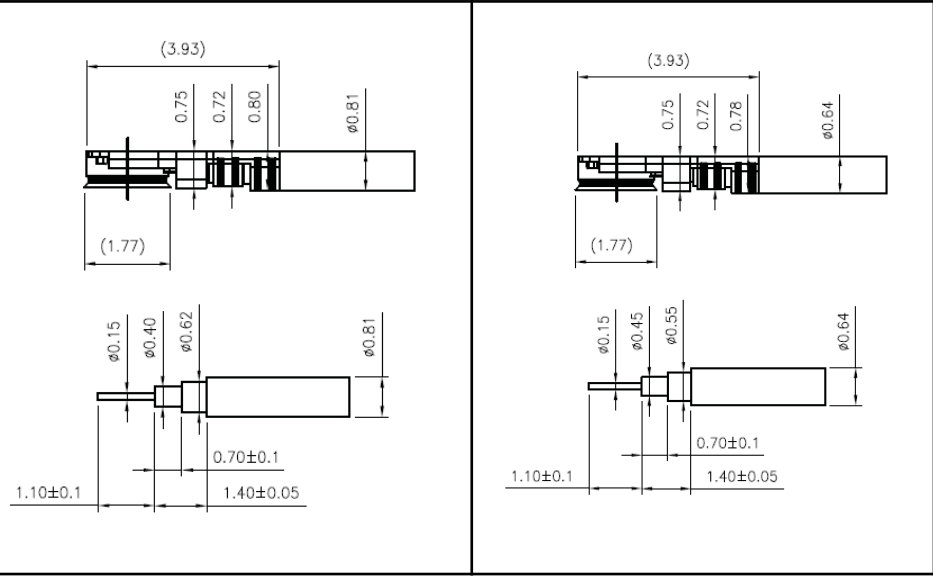


Graphic : (RF 5代)

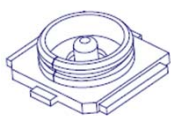
Plug (RF Cable)



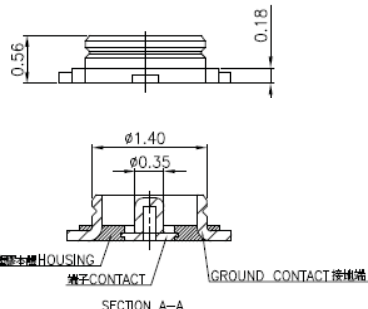
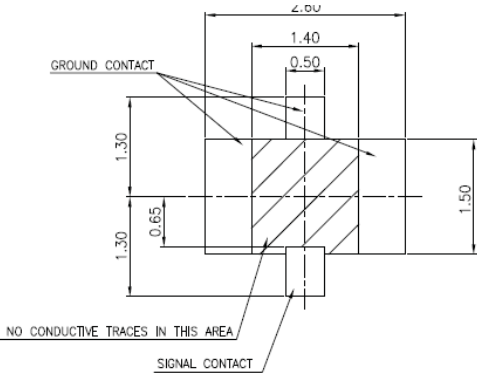
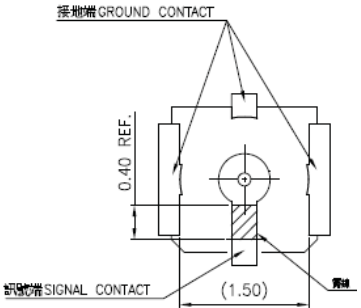
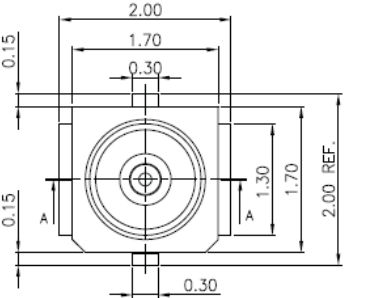
C81P102



Receptacle : C81P101
2.0 x 2.0 x 0.56 mm



Type	Plug P/N:	Receptacle P/N:	RF Cable Cable O.D (mm)				Mating Height
			1.37	1.13	0.81	0.64	
RF 5代	C81P102	C81P101 (2.0x2.0x0.56mm)					1.00 mm



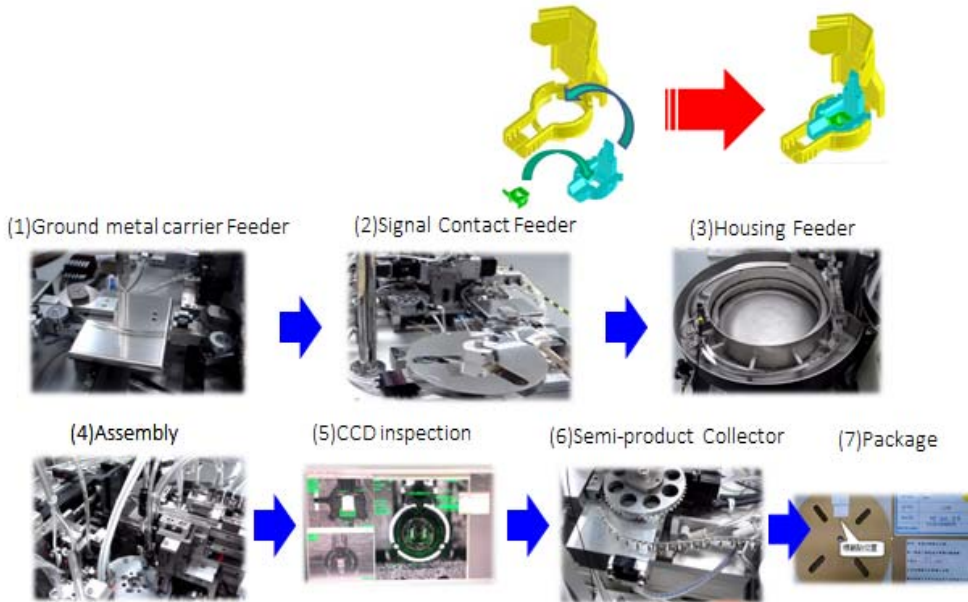
RECOMMENDED PCB MOUNTING PATTERN
THE MOUNTING PATTERN AND METAL MASK RATIO IS 1:1
(MASK THICKNESS 0.10/0.12mm)

Mass Production Capacity:

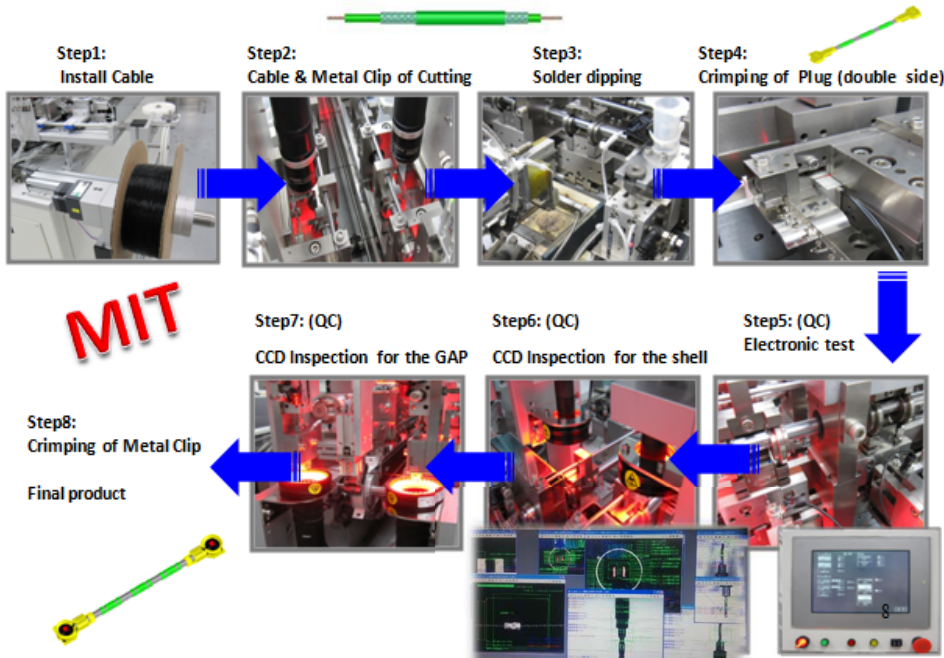
The whole process can be completed within one machine.

- All process by auto assembly machine
- 100% CCD Inspection

Plug



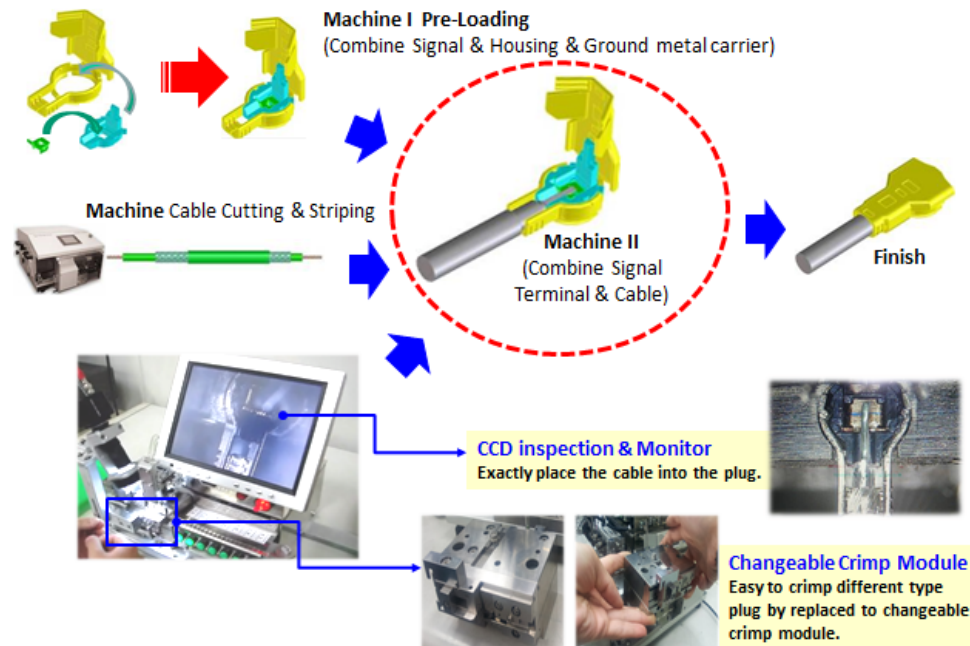
RF Cable (Auto)



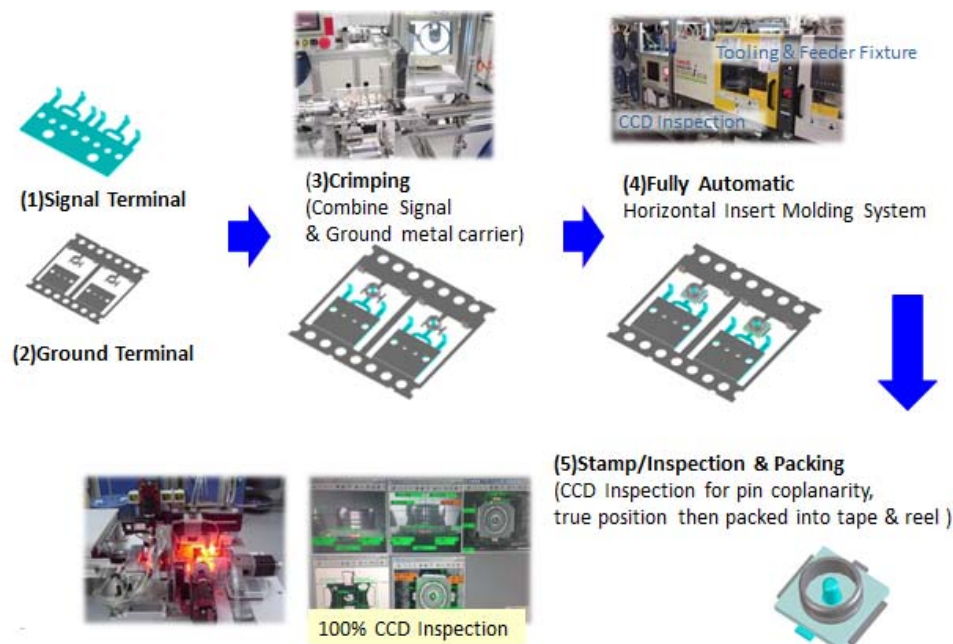
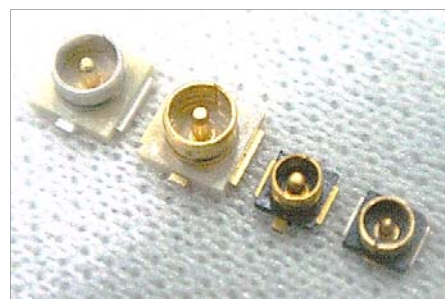
100% CCD Inspection

Mass Production Capacity:

RF Cable



Receptacle



Contact Us:



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