

## SPECIFICATION FOR APPROVAL

CUSTOMER:

CUSTOMER PARTNO:

SUPPLIER: Shenzhen Feasycom Co.,LTD

PRODUCT MODEL: FYT-04

PRODUCT NAME: 5.8G Rod Antenna

PRODUCT CODE: F12E00020A1 (M02-0700010R0A)

CUSTOMER SIGNATURE:

CUSTOMER SEAL:

SUPPLIER SIGNATURE:

SUPPLIER SEAL:

NOTE: PLEASE RETURN THIS COPY AS A CERTIFICATION OF YOUR APPROVAL

Prepared by: 董春玲	Date: 2022.06.17	Add:	Room 508, Building A, Phoenix Smart Valley, No. 50, Tiezi Road, Xixiang, Baoan District, Shenzhen
		Tel:	0755-27924639
		Fax:	



## PERFORMANCE PARAMETER

### 1. Electrical Characteristics

1	Frequency Range	5100MHz-5900MHz
2	V. S. W. R	<2.0
3	Gain	>4.4dBi
4	Impedence	50 $\Omega$
5	Polarization	Vertical polarization

### 2. Mechanical parameters

1	Measure	195.0mm* $\Phi$ 13mm
2	Interface type	SMA Male pin
3	Wire cable	RG178
4	Colour	Black

### 3. Environment Condition

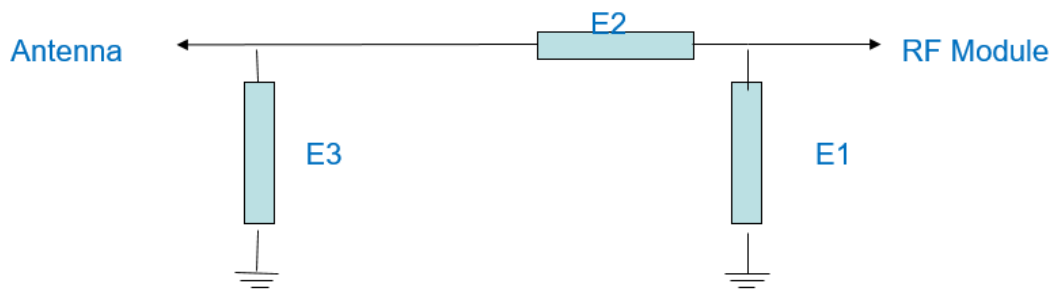
1	Working Temp	-40°C ~ +85°C
2	Storage Temp	-40°C ~ +85°C

# TESTING CURVE

## 1.Processing mode

### 1.1 Matching circuit

# Matching Circuit



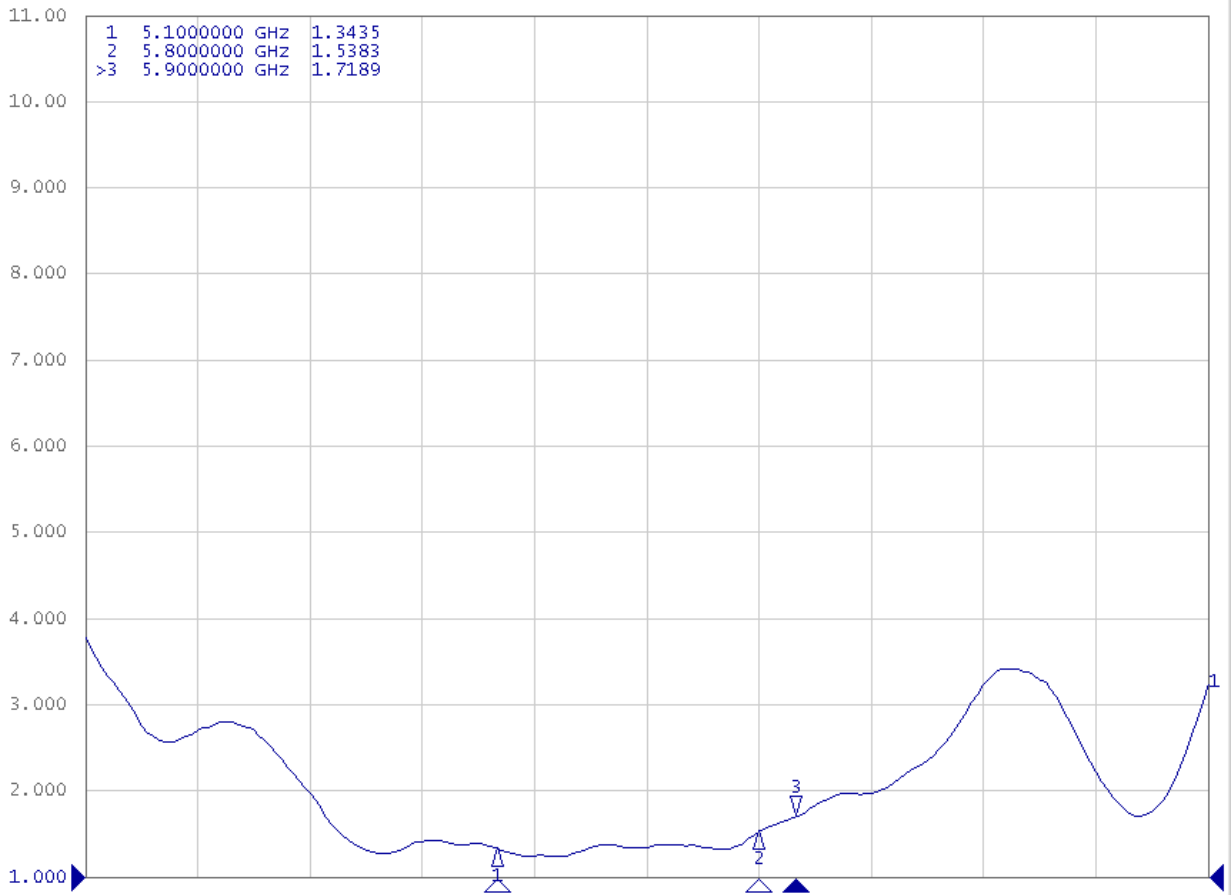
Element	Value
E1(0402)	NC
E2(0402)	0
E3(0402)	NC

# TESTING CURVE

## 2. Performance test

### 2.1 V.S.W.R

▶ **Tr1** S11 SWR 1.000/ Ref 1.000 [F1]



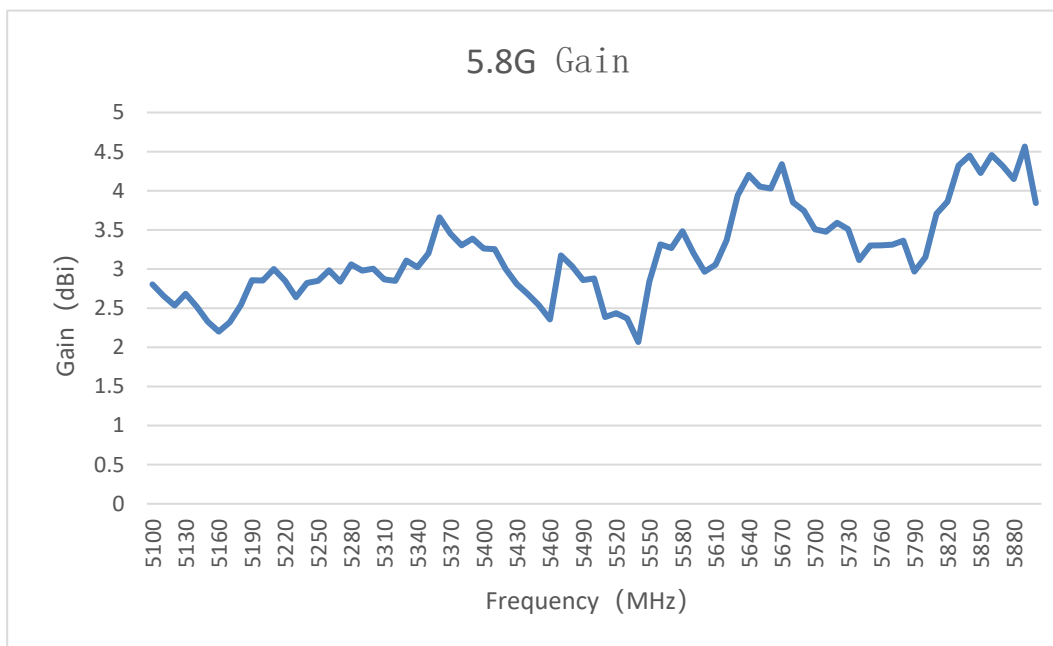
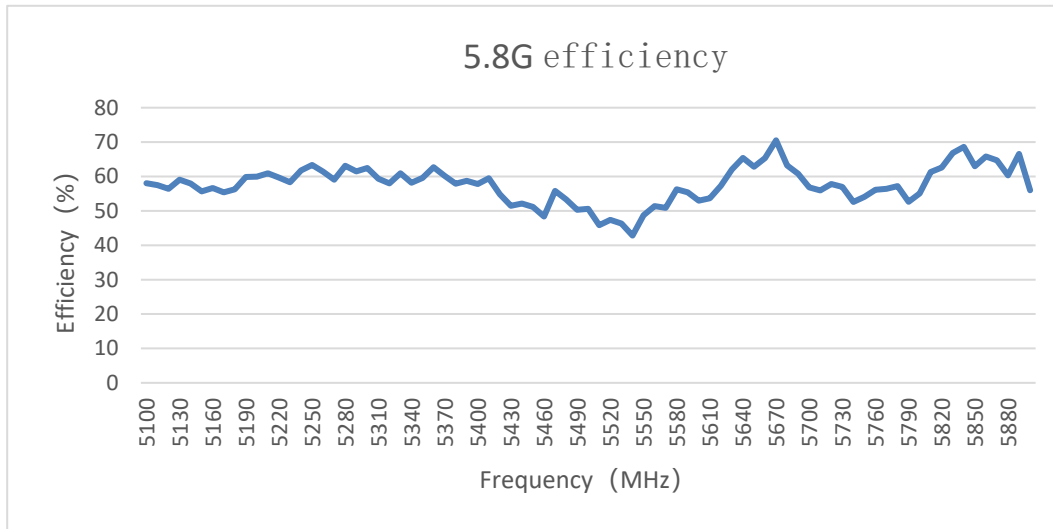
#### Data list

Freq/GHz	5.1	5.8	5.9
VSWR	1.34	1.53	1.71

# TESTING CURVE

## 2.2 Passive testing

### 2.2.1 Efficiency and Gain

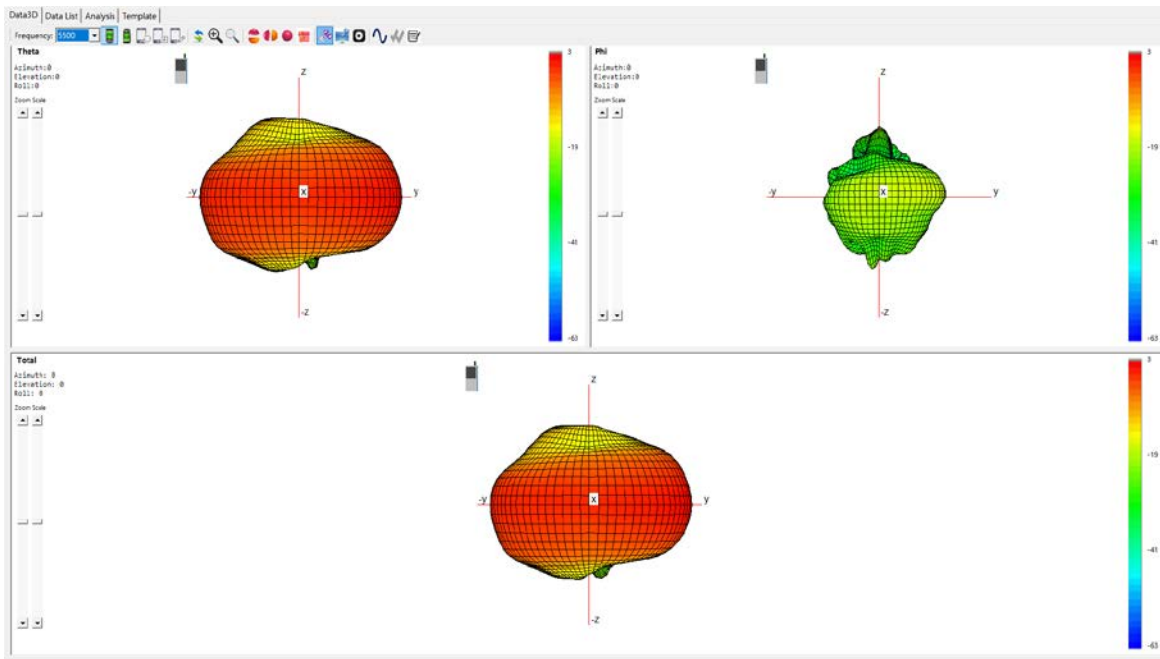


**Data list**

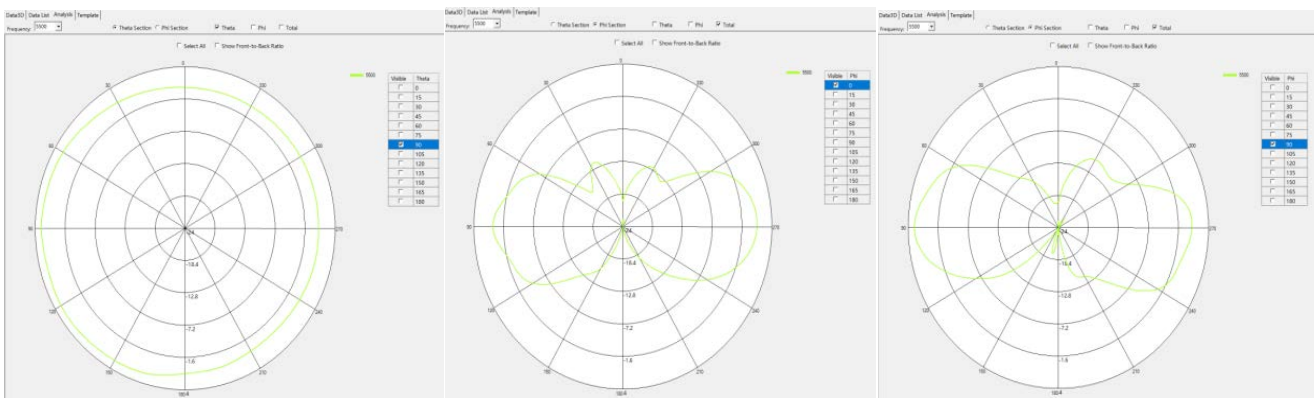
Freq (MHz)	Gain (dBi)	Efficiency (%)	Freq (MHz)	Gain (dBi)	Efficiency (%)	Freq (MHz)	Gain (dBi)	Efficiency (%)
5100	2.80	58.06	5370	3.45	60.19	5640	4.20	65.41
5110	2.66	57.47	5380	3.30	57.88	5650	4.05	62.82
5120	2.53	56.43	5390	3.39	58.74	5660	4.03	65.34
5130	2.68	59.07	5400	3.26	57.79	5670	4.34	70.51
5140	2.52	57.94	5410	3.25	59.47	5680	3.85	63.20
5150	2.33	55.66	5420	3.00	54.84	5690	3.74	60.77
5160	2.20	56.62	5430	2.81	51.47	5700	3.51	56.84
5170	2.32	55.41	5440	2.68	52.15	5710	3.48	55.93
5180	2.54	56.28	5450	2.54	51.17	5720	3.59	57.79
5190	2.86	59.84	5460	2.36	48.37	5730	3.51	56.95
5200	2.85	59.93	5470	3.17	55.79	5740	3.11	52.61
5210	3.00	60.92	5480	3.04	53.33	5750	3.30	54.10
5220	2.85	59.68	5490	2.86	50.30	5760	3.30	56.13
5230	2.64	58.31	5500	2.88	50.59	5770	3.31	56.43
5240	2.82	61.75	5510	2.39	45.87	5780	3.36	57.20
5250	2.85	63.36	5520	2.44	47.40	5790	2.97	52.66
5260	2.98	61.40	5530	2.37	46.33	5800	3.15	55.06
5270	2.84	59.07	5540	2.07	42.82	5810	3.71	61.29
5280	3.06	63.13	5550	2.84	48.73	5820	3.86	62.59
5290	2.98	61.48	5560	3.31	51.40	5830	4.32	66.85
5300	3.00	62.48	5570	3.27	50.88	5840	4.45	68.61
5310	2.87	59.32	5580	3.48	56.26	5850	4.23	62.98
5320	2.85	58.01	5590	3.20	55.38	5860	4.46	65.79
5330	3.11	60.91	5600	2.97	52.99	5870	4.32	64.70
5340	3.02	58.20	5610	3.05	53.65	5880	4.15	60.30
5350	3.20	59.59	5620	3.37	57.32	5890	4.57	66.57
5360	3.66	62.67	5630	3.94	62.05	5900	3.84	56.01

# TESTING CURVE

## 2.3 3D Map



## 2.4 2D Figure

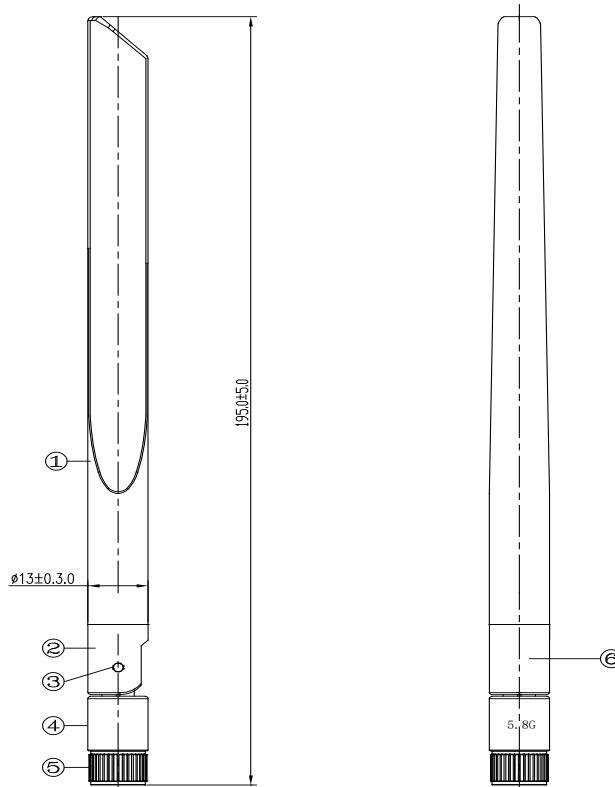




# SCHEDULE DRAWING



No.	Name	Material	Color	size	Amount	Remark
1	Antenna Jacket	TPE	Black	156mm* $\Phi$ 13mm	1	
2	Upper base	PC+PBT	Black	18* $\Phi$ 13mm	1	
3	Shaft	POM	Black	5* $\Phi$ 2.25mm	2	
4	Lower base	PC+PBT	Black	14.5* $\Phi$ 13mm	1	
5	SMA Connectors		Black	$\Phi$ 13.0 (male pin)	1	
6	Laser Engraving					



**Remark:**

- The dimensions marked with “ ” are key dimensions.
- The contents of Pb, Hg, Cr+6, PBBs, and PBDEs in each part are less than 500PPM, and Cd is less than 50PPM.

Rev	Description	Date	Remark	Location	DWG No.	Unit	mm	Scale	1:1
A0	New drawing	20220617							

Third Angle	Project	Designed by
0~10 $\pm$ 0.10	Part Name 5.8G Rob Antenna	Date
10~18 $\pm$ 0.15	Part No. M02-0700010R0A	Checked by RF
18~30 $\pm$ 0.20	Material	Date
30~40 $\pm$ 0.25		Approved by
40~ $\pm$ 0.30		

## Certificate of Acceptance Sample Size Inspection Report

Project Name		FYT-04		Antenna Type	5. 8G Rpb Antenna	Inspection date	2022. 06. 17		
Appearance inspection standards				1. There is no abnormality on the antenna surface.					
Dimensional inspection standards				2. Within the tolerance range required by the drawing					
Code	Inspection items	Specifications	Inspection tools	Number of samples	Judgment	Description			
1	Appearance	As above standard	Visual	3	OK				
2	Size	As shown in the following table	Vernier caliper	3	OK				
Code	Inspection items	Specifications	Inspection tools	Test results (including the highest and lowest values)					
				1	2	3	4	5	6
1	Appearance Size	$195.0 \pm 5.0$	Caliper	195.8	196.0	195.5			
2		$\varnothing 13 \pm 0.3$		13	13	13			
3									
4									
5									
Remark									
Approver: 杨永成			Reviewer: 陈建尤			Inspector: 董春玲			

## QC ENGINEERING DRAWING

<b>QC ENGINEERING DRAWING</b>		Document number	MA-QCW-2206-033		File name	FYT-04			Prepared by	赵艳
		Version	A			Reviewer	徐茂元			
		Release Date	2022.06.17		Effective Date	2022.06.17	Page	1/1	Approver	徐茂元
Code	Process	Process Name	Process parameters/ quality characteristics	Use equipment fixture	Testing equipment	Inspection method	Check frequency	Usage Record	Responsible	Related Documents
1		Incoming material inspection	Inspection standards/drawings	Caliper	/	Visual	AQL Sampling	IQC Inspection Report	IQC	
2		Production picking	Production order	/	/	/	/	Pick List	Warehouse keeper	
3		Unpack (open the bag) to confirm the quantity	Delivery Note	/	/	/	/	Delivery Note	Operator	
4		Assemble the SMA header	Technical Documents/ Drawings/BOM	/	Manual	Visual	Full inspection	Production daily report	Operator	
5		Inspection	IPQC Process Inspection Regulations	/	Visual	Visual	2H	IPQC process inspection records	IPQC	
6		Soldering PCB	Technical Documents/ Drawings/BOM	/	Manual	Visual	Full inspection	Production daily report	Operator	
7		Inspection	IPQC Process Inspection Regulations	/	Visual	Visual	2H	IPQC process inspection records	IPQC	
8		Assemble the enclosure	Technical Documents/ Drawings/BOM	/	Manual	Visual	Full inspection	Production daily report	Operator	

## QC ENGINEERING DRAWING

9	Inspection	IPQC Process Inspection Regulations	/	Visual	Visual	2H	IPQC process inspection records	IPQC	
10	Appearance inspection	Technical documents/drawings/appearance judgment criteria	/	Visual	Visual	Full inspection	Production daily report	inspector	
11	Testing	Technical documents/drawings	/	Network Analyzer	Testing Visual	Full inspection	Production daily report	Operator	
12	Packaging (bagging) quantity confirmation	Drawings/BOM	/	/	Visual	Full inspection	Production daily report	Operator	
13	Testing	IPQC Process Inspection Regulations	/	Visual	Visual	2H	IPQC process inspection records	IPQC	
14	Storage	Production order	/	/	/	/	Product Inventory Order	Warehouse keeper	
15	Pre-shipment inspection	Shipping Notice	Network Analyzer		Measurement	AQL Sampling	/	OQC	
Description: <input type="checkbox"/> operation and processing; <input type="checkbox"/> confirmation, inspection, judgment and approval; <input type="checkbox"/> Storage; <input type="checkbox"/> Transport									
Mark	Modifications			Version	Date	Modified by		Approver	
				A	2022.06.17	赵艳		徐茂元	

## ROHS TEST REPORT

Project material name	Material Code	Report test sample name	Testing agency	Testing time	Test report number	Test Conclusion	Remark
FYT-04 (M02-0700010R0A)	F12E00020A1	Base	SGS	2022/3/10	CANEC2203190501	OK	
		Shell	SGS	2021/11/3	CANEC2120138401	OK	
		SMA	SGS	2021-10-27	CANEC2118965605	OK	
		PCB	SGS	2021/11/4	NGBML2105022604	OK	
		Foam	SGS	2022-01-04	CANEC2124348308	<u>OK</u>	
		Coaxial Cable	SGS	2021-08-23	CANEC2114861410	OK	
Fictitious person: 董春玲		Reviewer: 陈建尤		Date: 2022.06.17		Stamping place:	

## PRODUCT VERIFICATION

Test items	Test description/test standard	Target Requirements	Product Verification (PV)						Remark
			Sample		Trial Location		test	Responsible Person	
			Number	Type	guest	supplier	Third Party		
Appearance inspection	The surface should not have defects such as dents, scratches, cracks, deformation, burrs, mildew spots, etc.; the surface coating should not bubble, crack, or fall off; metal parts should not have rust or other mechanical damage; the injection material should not overflow.	Normal appearance	Full inspection	Tooling parts		√		OK	
Size	According to drawing size	Within the size tolerance	3pcs	Tooling parts		√		OK	
Performance Check	The product meets the requirements of the design specification	Short circuit and continuity test	Full inspection	Tooling parts		√		OK	
Insertion and extraction force	SMA Header Insertion and Extraction Force	Pull-out test, the bearing capacity is greater than 2N	3pcs	Tooling parts		√		OK	
Salt spray resistant	SMA first 48 hours salt spray test	The surface is not rusted after cycle verification	3pcs	/		√		OK	
Requirements for banned and restricted substances	Tested in accordance with RoHs requirements	Products should comply with RoHs standards	/	/			√	OK	
Packaging Specifications	Place according to the drawing specifications	Visual inspection and placement as required	Full inspection	Tooling parts		√		OK	