



APPROVAL SHEET

CUSTOMER NAME		
CUSTOMER P/N	1.07.000034	
PART NAME	4G white integrated antenna 1.13 White L=240mm	
P/ N	YJC-6C240-W10	
APPROVAL REV.	A0	
DELIVERY DATE	2022-11-24	
PREPARED BY	Mr WU	
CHECKED BY	Mr FANG	
APPROVED BY		
Customer Approved		
Prepared By	Checked By	Approved By

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Catalogue

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Antenna plan:

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A	B	C	D	E	F	G																												
1	<div style="float: right; border: 1px solid black; padding: 2px;"> RoHS </div>					2																												
3	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Frequency Range</td> <td>700-960/1710-2700MHz</td> </tr> <tr> <td>Gain</td> <td>3dBi</td> </tr> <tr> <td>VSWR</td> <td><3.5</td> </tr> <tr> <td>Polarization</td> <td>Linear, Vertical</td> </tr> <tr> <td>Max power rating</td> <td>50W</td> </tr> <tr> <td>Impedance</td> <td>50Ω</td> </tr> </table>					Frequency Range	700-960/1710-2700MHz	Gain	3dBi	VSWR	<3.5	Polarization	Linear, Vertical	Max power rating	50W	Impedance	50Ω	4																
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5	<p>Requirement:</p> <ol style="list-style-type: none"> The finished product must be pass test 100% OK The finished product shall be subject to 100% full inspection OK. The finished product adopts environmental protection process. Meet RoHS requirements No tolerance shall be subject to general tolerances The * marks the key dimensions. 					6																												
6	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center;"> </td> <td style="width: 15%; text-align: center;"> 4G White (PRODUCT NAME) Integrated antenna </td> <td style="width: 15%; text-align: center;"> 1.13 White antenna wire L=240mm </td> <td style="width: 15%; text-align: center;"> SHEENZHEN YINGJIACHUANG ELECTRONIC TECHNOLOGY CO.,LTD </td> <td style="width: 15%; text-align: center;"> Mr. WU Mr. FANG </td> <td style="width: 15%; text-align: center;"> NEW 2022-11-24 </td> <td style="width: 15%; text-align: center;"> Mr. WU </td> </tr> <tr> <td style="text-align: center;"> Part Name (PRODUCT NAME) </td> <td style="text-align: center;"> Unit (UNIT) </td> <td style="text-align: center;"> Scale (SCALE) </td> <td style="text-align: center;"> Rev (REV) </td> <td style="text-align: center;"> Size (SIZE) </td> <td style="text-align: center;"> Date (DATE) </td> <td style="text-align: center;"> Name </td> </tr> <tr> <td style="text-align: center;"> Part No. (PART NO.) </td> <td style="text-align: center;"> Product Specification (PRODUCT SPECIFICATION) </td> <td style="text-align: center;"> Product No. (PRODUCT NO.) </td> <td style="text-align: center;"> Original Date (ORIGINAL DATE) </td> <td colspan="3"></td> </tr> <tr> <td style="text-align: center;"> Dimension (DIMENSION) </td> <td style="text-align: center;"> Unit (UNIT) </td> <td style="text-align: center;"> Scale (SCALE) </td> <td style="text-align: center;"> Rev (REV) </td> <td style="text-align: center;"> Size (SIZE) </td> <td style="text-align: center;"> Date (DATE) </td> <td style="text-align: center;"> Name </td> </tr> </table>						4G White (PRODUCT NAME) Integrated antenna	1.13 White antenna wire L=240mm	SHEENZHEN YINGJIACHUANG ELECTRONIC TECHNOLOGY CO.,LTD	Mr. WU Mr. FANG	NEW 2022-11-24	Mr. WU	Part Name (PRODUCT NAME)	Unit (UNIT)	Scale (SCALE)	Rev (REV)	Size (SIZE)	Date (DATE)	Name	Part No. (PART NO.)	Product Specification (PRODUCT SPECIFICATION)	Product No. (PRODUCT NO.)	Original Date (ORIGINAL DATE)				Dimension (DIMENSION)	Unit (UNIT)	Scale (SCALE)	Rev (REV)	Size (SIZE)	Date (DATE)	Name	6
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**Antenna technical parameters and environmental performance testing**

Electrical Specifications		Mechanical Specifications	
Frequency Range	700-960/1710-2700MHz	Antenna Color	White
VSWR	<3.5	Input connector	XD
Input Impedance	50 Ω	Cable length	240mm
Direction	All	Working Temperature	-20℃~+70℃
Gain	3.0dBi	Working Humidity	20~80%

Environmental performance testing:

Project	Test condition	Standard
Storage Conditions	In the absence of specified test temperature, humidity, air pressure is as follows: 1. Temperature is - 30 °C ~ + 80 °C 2. Relative humidity of 45% to 45% 3. Air pressure is 86 kpa to 106 kpa	Electrical and mechanical performance is normal
High and low temperature test	Between 70 °C and -20 °C for 5 loops, then 1-2 h under normal conditions, check the appearance quality.	Size should meet the requirements and meet the performance of machinery and electric.
Constant damp and hot resistance test	95 + / - 3% relative humidity, temperature test: 40 °C. Lasts 2 h after, try to take out the determination of electrical properties, within 5 min after try 1-2 h under article normal thing, check the appearance quality	Size should meet the requirements and meet the performance of machinery and electric.
vibration test	10-55 hz, vibration frequency range of displacement amplitude: 0.35 MM, acceleration amplitude: 50.0 M/S, sweep cycles: 30 times	Electrical and mechanical performance is normal
Fall down test	1 m high altitude in accordance with the perpendicular axis free drop 3 times	Electrical and mechanical performance is normal



Actual picture of antenna:



Antenna performance test diagram:



4G Test data:

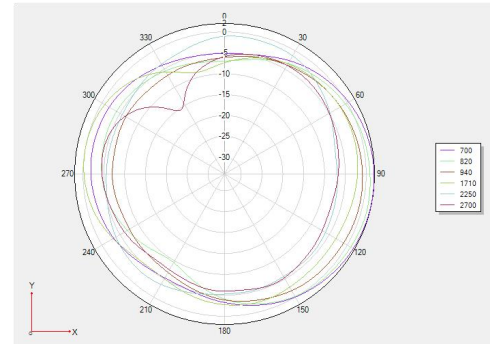
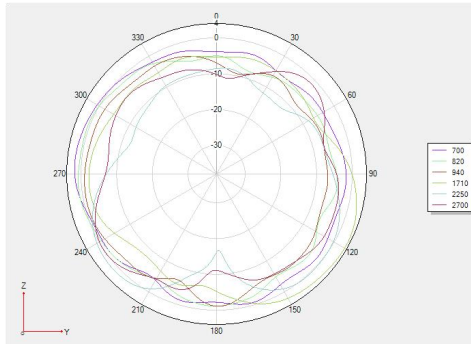
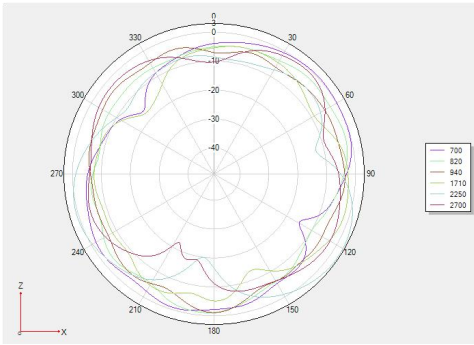
Frequency	Efficiency (%)	Gain. (dBi)
700MHz	33.96	2.08
740MHz	39.45	0.78
780MHz	42.76	2.42
820MHz	39.63	1.26
860MHz	34.2	-0.2
900MHz	33.19	-1.31
940MHz	36.39	-0.49
1710MHz	44.77	3.51
1800MHz	45.81	2.55
1890MHz	47.53	2.76
1980MHz	45.08	1.86
2070MHz	46.03	2.59
2160MHz	51.17	3.3
2250MHz	50.12	3.64
2340MHz	48.31	3.24
2430MHz	47.21	2.9
2520MHz	50.23	3.05
2610MHz	44.98	1.77
2700MHz	36.98	1.32



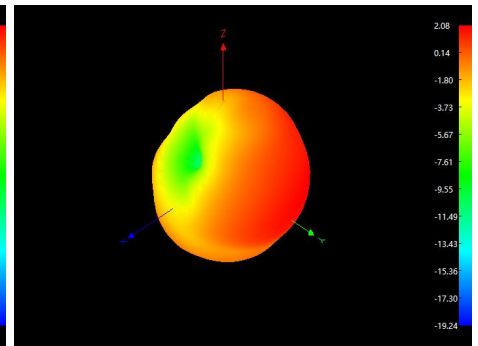
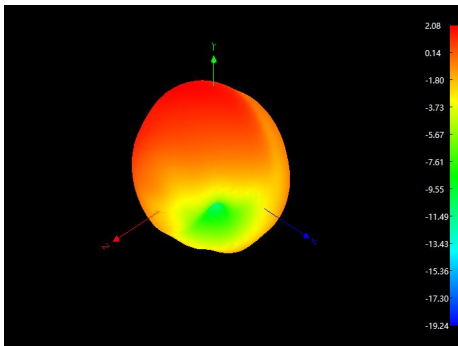
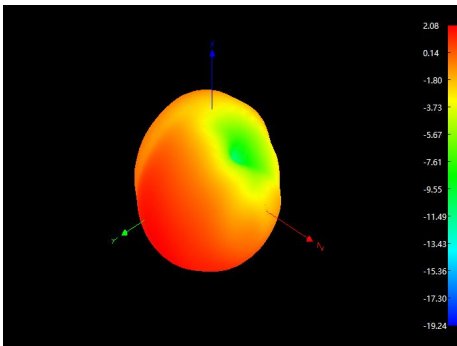
Phi 0 2D 图

Phi 90 2D 图

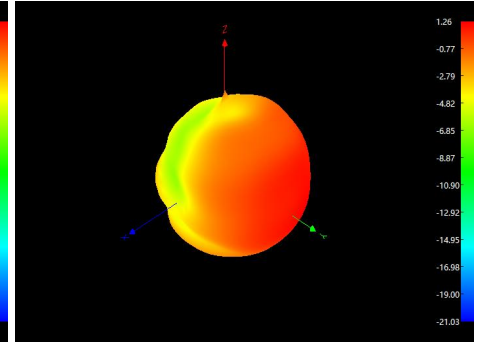
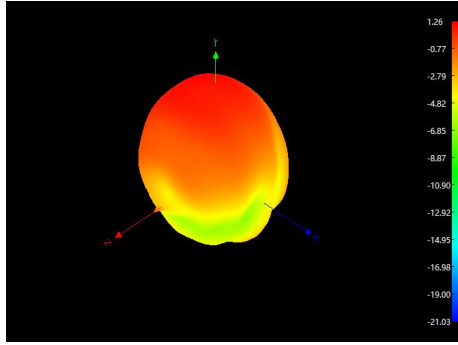
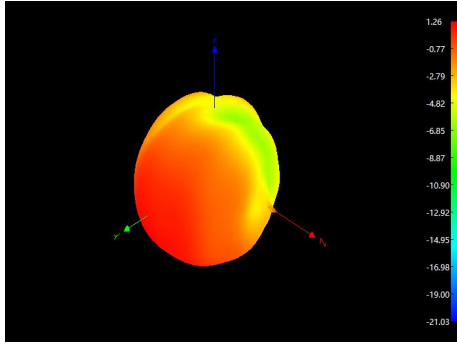
Theta 90 2D 图



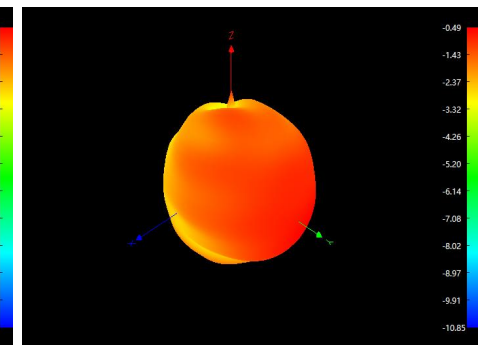
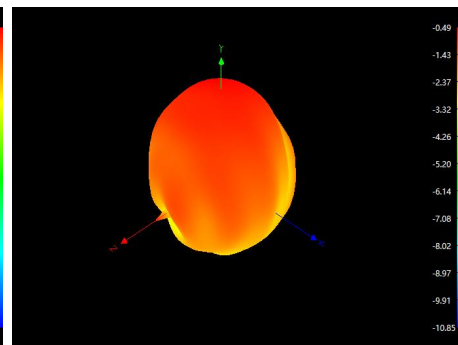
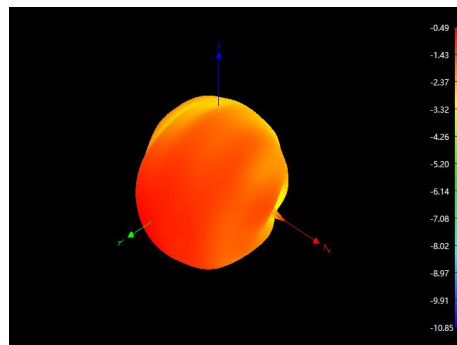
3D 700



3D 820

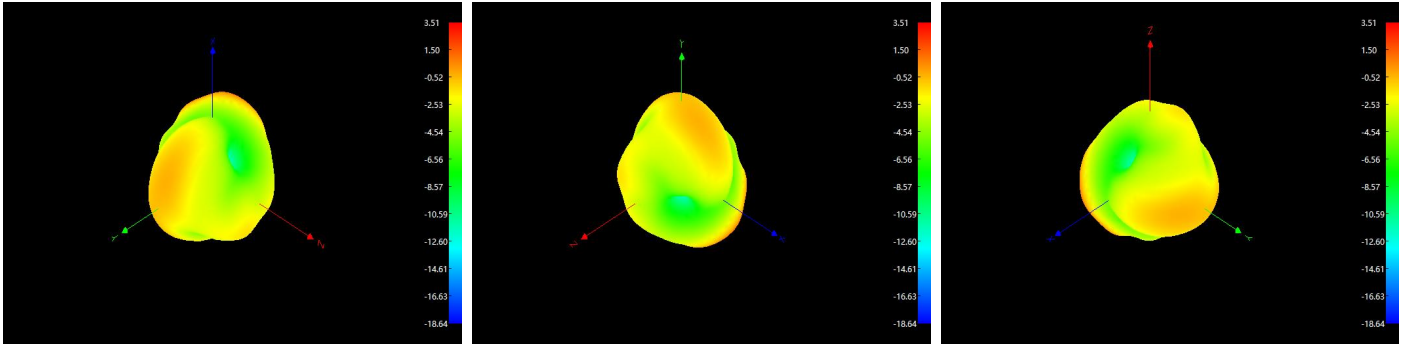


3D 940

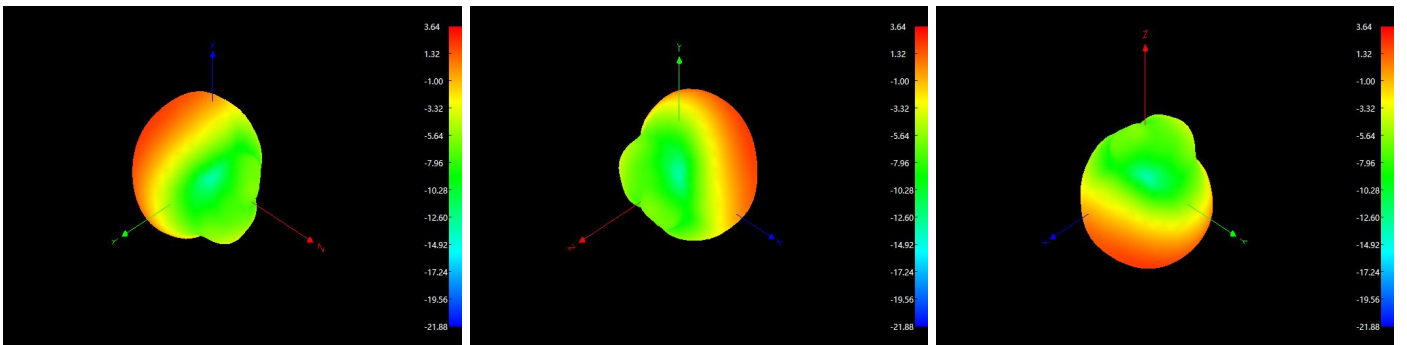




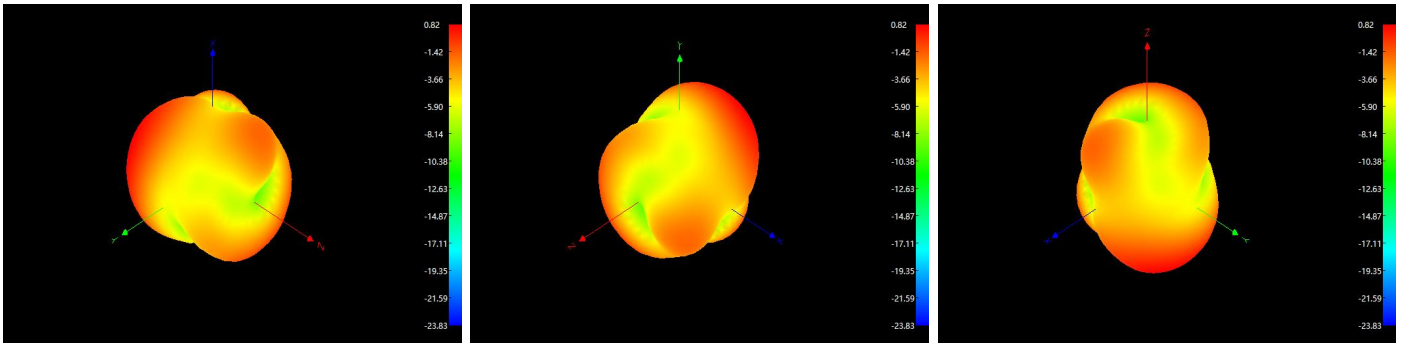
3D 1710



3D 2250



3D 2700





OTA Active Test Data Statistics (US version):

Item	Measurement	Band	Channel	Frequency	Total
1	TRP	FDD_B2(10MHz)	18650	1855	18.95
2	TRP	FDD_B2(10MHz)	18900	1880	18.87
3	TRP	FDD_B2(10MHz)	19150	1905	18.91
4	TIS(RSSI)	FDD_B2(10MHz)	1150	1985	-93.52
5	TRP	FDD_B4(10MHz)	20000	1715	19.45
6	TRP	FDD_B4(10MHz)	20175	1732.5	18.67
7	TRP	FDD_B4(10MHz)	20350	1750	18.36
8	TIS(RSSI)	FDD_B4(10MHz)	2350	2150	-94.54
9	TRP	FDD_B5(10MHz)	20450	829	19.69
10	TRP	FDD_B5(10MHz)	20525	836.5	19.5
11	TRP	FDD_B5(10MHz)	20600	844	17.83
12	TIS(RSSI)	FDD_B5(10MHz)	2600	889	-87.05
13	TRP	FDD_B12(10MHz)	23060	704	18.78
14	TRP	FDD_B12(10MHz)	23095	707.5	18.71
15	TRP	FDD_B12(10MHz)	23130	711	18.32
16	TIS(RSSI)	FDD_B12(10MHz)	5130	741	-88.52
17	TRP	FDD_B13(10MHz)	23230	782	17.04
18	TIS(RSSI)	FDD_B13(10MHz)	5230	751	-88.48
19	TRP	FDD_B14(10MHz)	23330	793	17.43
20	TIS(RSSI)	FDD_B14(10MHz)	5330	763	-87.7
21	TRP	FDD_B66(10MHz)	132022	1715	20.27
22	TRP	FDD_B66(10MHz)	132322	1745	19.97
23	TRP	FDD_B66(10MHz)	132622	1775	19.75
24	TIS(RSSI)	FDD_B66(10MHz)	67036	2170	-94.7
25	TRP	FDD_B71(10MHz)	133172	668	18.14
26	TRP	FDD_B71(10MHz)	133297	680.5	18.4
27	TRP	FDD_B71(10MHz)	133422	693	18.42
28	TIS(RSSI)	FDD_B71(10MHz)	68836	642	-83.52




OTA Active Test Data Statistics (Euro Edition):

Item	Measurement	Band	Channel	Frequency	Total
1	TRP	FDD_B1(10MHz)	18050	1925	20.18
2	TRP	FDD_B1(10MHz)	18300	1950	19.02
3	TRP	FDD_B1(10MHz)	18550	1975	19.12
4	TIS(RSSI)	FDD_B1(10MHz)	550	2165	92.19
5	TRP	FDD_B3(10MHz)	19250	1715	18.67
6	TRP	FDD_B3(10MHz)	19575	1747.5	17.48
7	TRP	FDD_B3(10MHz)	19900	1780	17.97
8	TIS(RSSI)	FDD_B3(10MHz)	1900	1875	93
9	TRP	FDD_B5(10MHz)	20450	829	15.2
10	TRP	FDD_B5(10MHz)	20525	836.5	15.7
11	TRP	FDD_B5(10MHz)	20600	844	15.26
12	TIS(RSSI)	FDD_B5(10MHz)	2600	889	80.6
13	TRP	FDD_B7(10MHz)	20800	2505	19.68
14	TRP	FDD_B7(10MHz)	21100	2535	19.56
15	TRP	FDD_B7(10MHz)	21400	2565	18.62
16	TIS(RSSI)	FDD_B7(10MHz)	3400	2685	92.36
17	TRP	FDD_B8(10MHz)	21500	885	16.46
18	TRP	FDD_B8(10MHz)	21625	897.5	16.68
19	TRP	FDD_B8(10MHz)	21750	910	15.74
20	TIS(RSSI)	FDD_B8(10MHz)	3750	955	87.67
21	TRP	FDD_B20(10MHz)	24200	837	16.03
22	TRP	FDD_B20(10MHz)	24300	847	16.97
23	TRP	FDD_B20(10MHz)	24400	857	17.2
24	TIS(RSSI)	FDD_B20(10MHz)	6400	816	82.07
25	TRP	FDD_B28(10MHz)	27260	708	17.51
26	TRP	FDD_B28(10MHz)	27435	725.5	16.8
27	TRP	FDD_B28(10MHz)	27610	743	16.12
28	TIS(RSSI)	FDD_B28(10MHz)	9610	798	-84.48
29	TRP	FDD_B1(10MHz)	18050	1925	20.18



Item	Measurement	Band	Channel	Frequency	Total
30	TRP	TDD_B38(20MHz)	37850	2580	17
31	TRP	TDD_B38(20MHz)	38000	2595	17.48
32	TRP	TDD_B38(20MHz)	38150	2610	18.94
33	TIS(RSSI)	TDD_B38(20MHz)	38150	2610	-89.97
34	TRP	TDD_B40(20MHz)	38750	2310	18.44
35	TRP	TDD_B40(20MHz)	39150	2350	17.57
36	TRP	TDD_B40(20MHz)	39550	2390	18.45
37	TIS(RSSI)	TDD_B40(20MHz)	39550	2390	-91.14
38	TRP	TDD_B41(20MHz)	39750	2506	2.35
39	TRP	TDD_B41(20MHz)	40620	2593	17.04
40	TRP	TDD_B41(20MHz)	41490	2680	17.5
41	TIS(RSSI)	TDD_B41(20MHz)	41490	2680	-89.58



产品规格 Product Type		1.13 单银线		
结构图 Structure Drawing				
结构特性 Structure Characteristics				
结构 Structure	项目 Item	标准值 Standard Value		
内导体 Inner Conductor	材质 Material	镀银铜线 Silver plated copper wire		
	构成(根/mm/Composition(No./mm))	7/0.08±0.005		
	标称外径 Nom.Dia(mm)	Φ0.24±0.01		
绝缘层 Insulation	材质 Material	聚全氟乙丙烯/FEP		
	标称外径 Nom.Dia(mm)	Φ0.7±0.03		
外导体 Outer Conductor	材质 Material	镀锡铜线 Tinned copper		
	形式 Form	编织/Weaving		
	遮蔽率/ Shielding rate	≥90%		
	标称外径 Nom.Dia(mm)	Φ0.92±0.03		
护套 Jacket	材质 Material	聚全氟乙丙烯/FEP		
	标称外径 Nom.Dia(mm)	Φ1.13±0.05		
电气性能 Electrical Characteristics				
项目 Item	标准值 Standard Value	项目 Item	频率 Frequency	标准值 Standard Value
阻抗 Impedanc (Ω)	50±3	衰减 Attenuation@20 °C (dB/100m)	1GHz	≤2.23
电容 Capacitance(pF/m)	98		2GHz	≤3.15
抗拉强度 Tensile strengthkgf/mm²	1.76		3GHz	≤3.96
驻波比 VSWR	≤1.40@0-6GHz		4GHz	≤4.6
耐压强度 Dielectric Strength (A.C V/1min)	1000		5GHz	≤5.15
最大工作频率 (MHz) Max.oper. frequency	6000		6GHz	≤5.7
可靠性 Dependability				
最小弯曲半径(单次)Min.Bending Radius/Single		mm	4	
最小弯曲半径(重复) Min.Bending Radius/Repeated		mm	8	
工作温度范围 Operating Temperature		°C	-20~+80	
包装 Packing				
包装方式 Packing Mode	1000 (m/盘) 成卷 Reel			
使用提示 Trips for Use				
存储环境 Storage Environment	温度: 30°C以下, 湿度: 20-65%			
铁氟龙收缩 Teflon Shrink	绝缘层收缩≤0.2mm; 护套层收缩≤0.3mm			
加工温度 Processing temperature	250°C~260°C的情况下, 可短时间承受; 300°C以上会出现热分解现象			
最佳保存周期 The best save cycle	2 个月, 2 个月以上锡效果变差,但电性能不受影响, 夏季高温高湿环境开剥后需尽快流转			



Material RoHS conformity declaration form

We hereby certify that the raw materials used and the additives in the production engineering of the products to your company are conformed to the RoHS environmental requirements. (RoHS directive 2011/65 / EU)

About the report of composition of raw materials, packaging materials and additives used in the production process for components and auxiliary materials is as bellow:

Component /Part Name	Material Composition	ICP report #	Test Org.	Test Date	Content of harmful substances (ppm)						PASS?
					Cd	Pb	Hg	Cr ⁶⁺	PBB	PBDE	PASS
Wire rod	Teflon coaxial cable	SZXEC2202766604	SGS	22/08/18	ND	ND	ND	ND	ND	ND	PASS
PCB	PCB	CANEC2202816806	SGS	22/03/08	ND	8	ND	ND	ND	ND	PASS
XD	tin-phosphor bronze	CANEC2201952008	SGS	22/02/18	ND	5	ND	ND	ND	ND	PASS
	gold plate	A2220404860101001C	CTI	22/09/17	ND	ND	ND	ND	ND	ND	PASS
	rubber core	A2220046361101002ER1	SGS	22/02/22	ND	ND	ND	ND	ND	ND	PASS
Plastic parts	ABS	238539448h001	SGS	22/03/07	ND	ND	ND	ND	ND	ND	PASS