APPROVAL SHEET

CUSTOMER NAME	
CUSTOMER P/N	
PART NAME	2.4G/5.8G black PCB Internal antenna 1.13 Black line L=60mm (Applicable model: GM3000，NM3098,NM3098B)
P/ N	YJC-6N060-B126
APPROVAL REV.	A0
DELIVERY DATE	August 25th, 2023
PREPARED BY	Yin Feijie
CHECKED BY	Fang Wenfeng
APPROVED BY	Chauhan

Customer Approved		
Prepared By	Checked By	Approved By

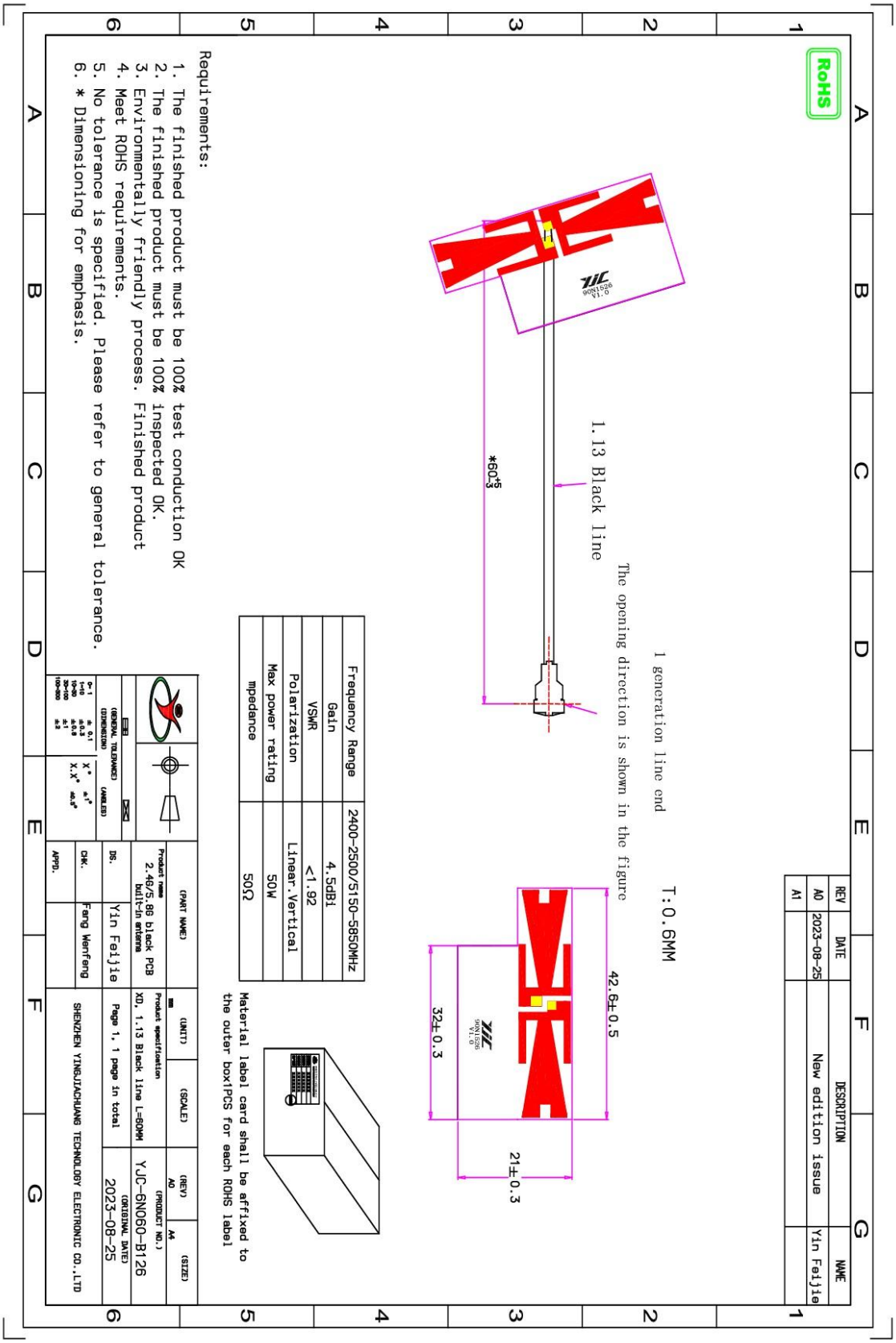
Contact Information (factory) :
Company address: building A.C, guangming valley, hongyu guangming valley, no. 11, jiangyou magang, shiwei community, matantian office, guangming district, shenzhen
Hangzhou Office: 212, Building B, Dahua Jianghong International Innovation Park, No. 369, Internet of Things Street, Binjiang District, Hangzhou
Phone + 86-755-27810060/23192199; Fax: + 86-0755-27810057
Company website: http://www.szsyjc.com E-mail: yjc@szsyjc.com

Catalogue

resume：

edition	Content of change and reasons for change	date	release
A/0	Initial release	August 25th, 2023	

Antenna plan：



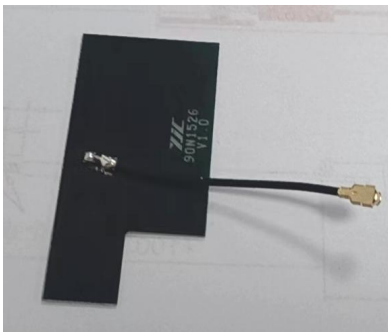
Antenna technical parameters and environmental testing：

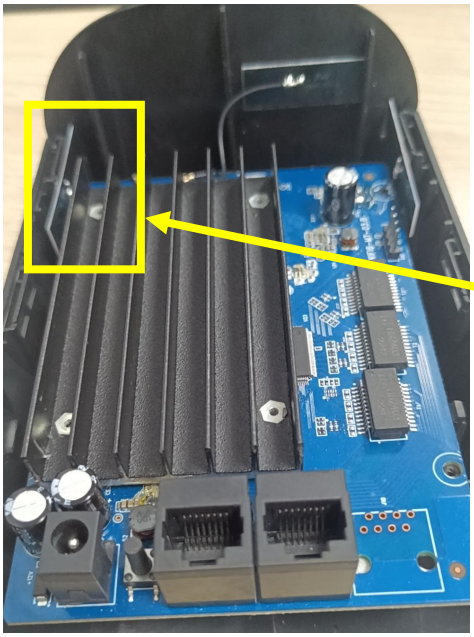
Electrical technical parameter			
Electrical Specifications		Mechanical Specifications	
Frequency Range	2400-2500/5150-5850MHz	Cable Color	Black
VSWR	＜1.92	Input connector	XD
Input Impedance	50 Ω	Cable length	60mm
Direction	All	Working Temperature	-20℃~+70℃
Gain	4.5dBi	Working Humidity	20%~80%

Environmental performance test：

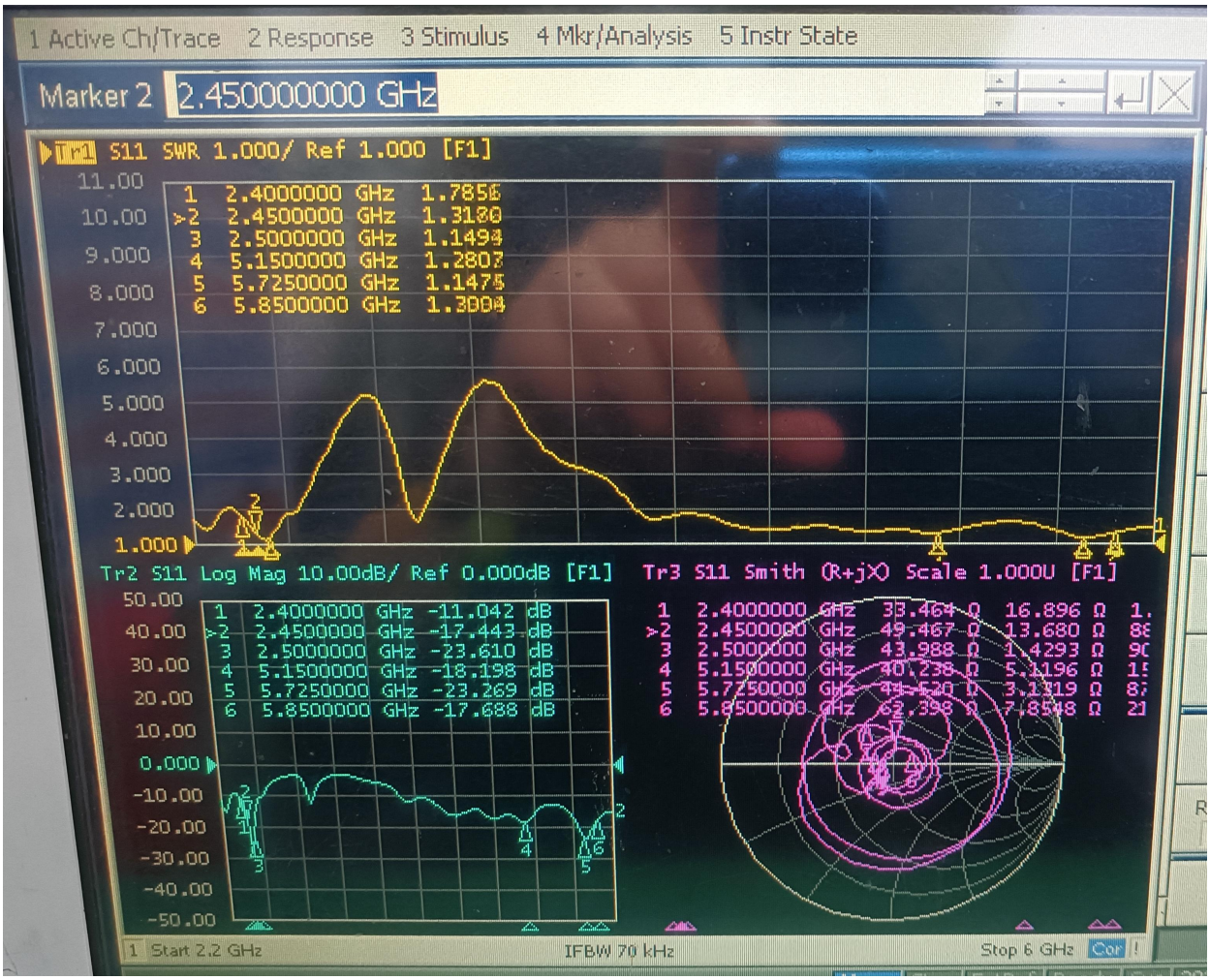
Project	Test condition	Standard
Storage Conditions	In the absence of specified test temperature, humidity, air pressure is as follows:: 1. Temperature is - 30 ℃ ~ + 80 ℃ 2. Relative humidity of 45% to 45% 3. Air pressure is 86 kpa to 106 kpa	Electrical and mechanical performace is normal
High and low temperature test	Between 70 ℃ and -20 ℃ for 5 loops, then 1-2 h under normal conditions, check the appearance quality.	Size should meet the requirements and meet the performance of mechinery and electric.
Constant damp and hot resistance test	95 + / - 3% relative humidity, temperature test: 40 ℃. 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 mechinery 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 performace is normal
Fall down test	1 m high altitude in accordance with the perpendicular axis free drop 3 times	Electrical and mechanical performace is normal

Antenna physical diagram and attached location diagram:





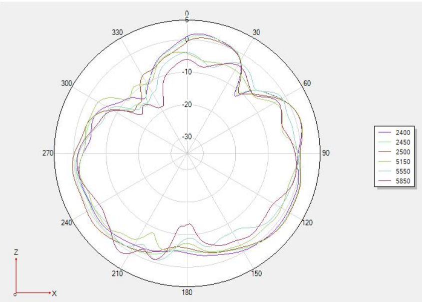
Antenna performance test diagram:



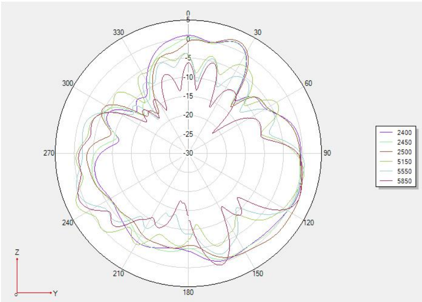
2D and 3D test data (2.4G/5.8G):

Frequency	Efficiency (%)	Gain.(dBi)
2400MHz	63.1	3.12
2410MHz	64.27	3.02
2420MHz	65.16	3.15
2430MHz	65.46	2.88
2440MHz	68.87	2.85
2450MHz	67.14	2.9
2460MHz	69.34	2.91
2470MHz	70.47	3.06
2480MHz	69.5	3.19
2490MHz	71.94	3.28
2500MHz	65.46	3.57
5150MHz	63.1	2.82
5250MHz	62.66	4.2
5350MHz	62.52	3.29
5450MHz	59.57	3.44
5550MHz	62.09	3.42
5650MHz	59.43	3.36
5750MHz	60.53	3.57
5850MHz	59.16	3.85

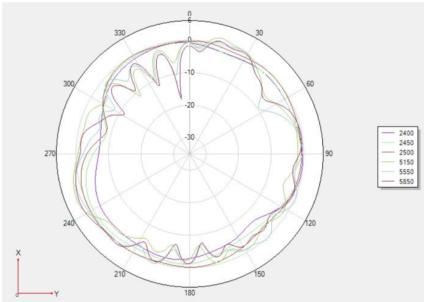
Phi 0 2D:



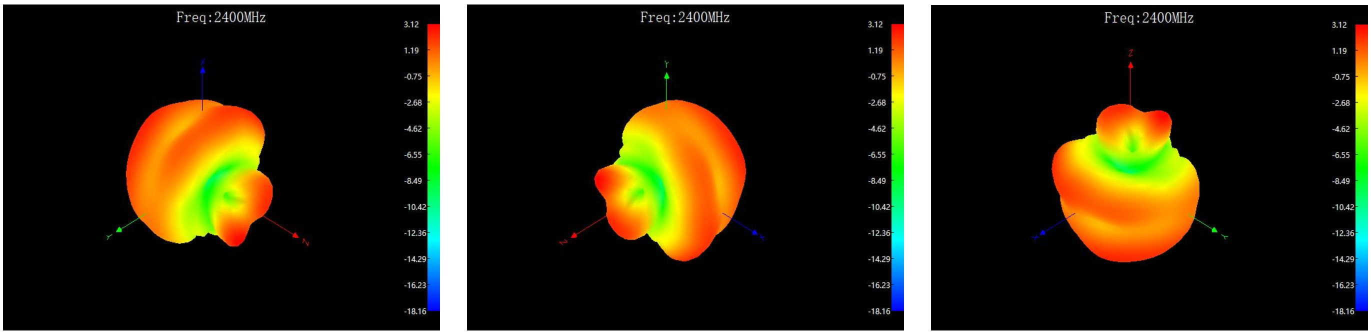
Phi 90 2D



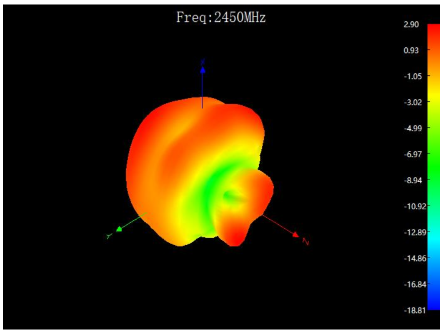
Theta 90 2D

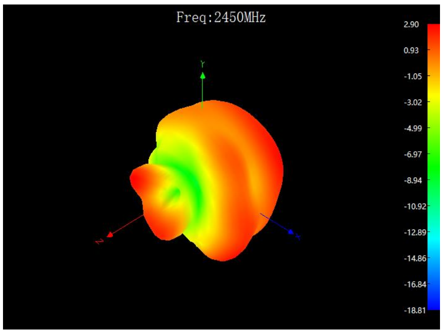


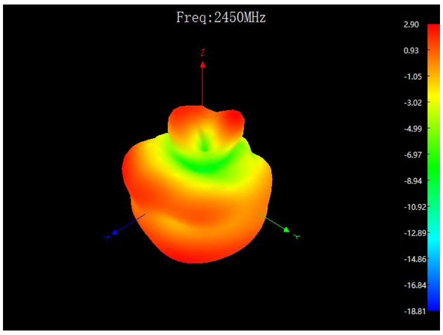
3D 2400:



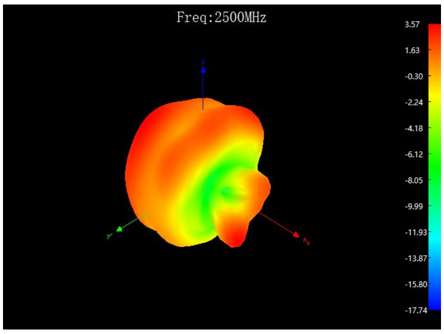
3D 2450:

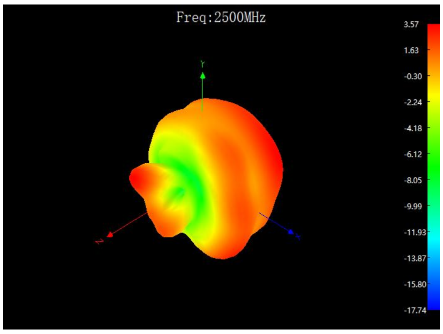


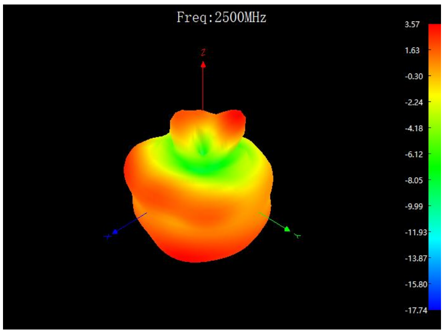




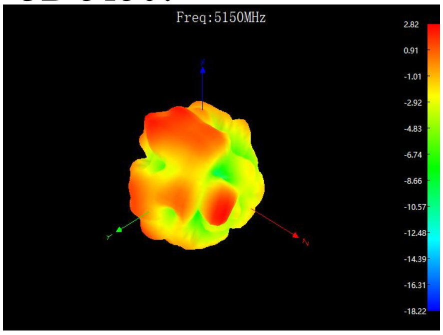
3D 2500:

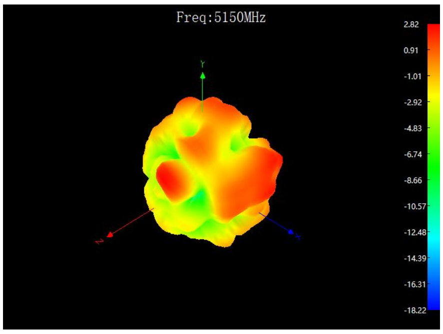


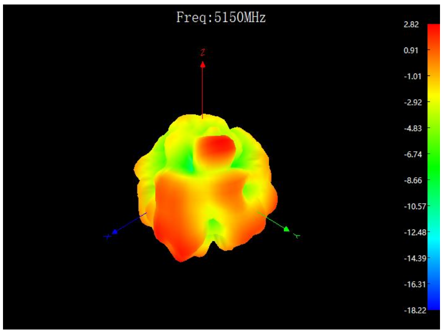




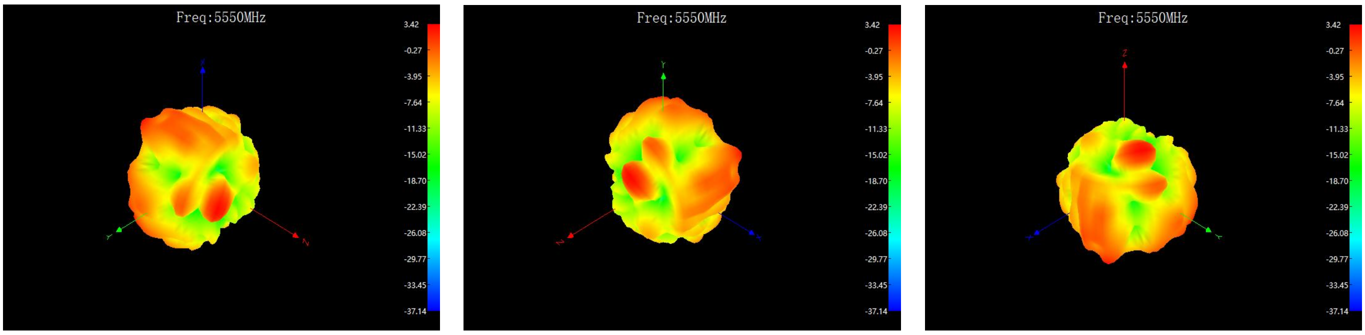
3D 5150:



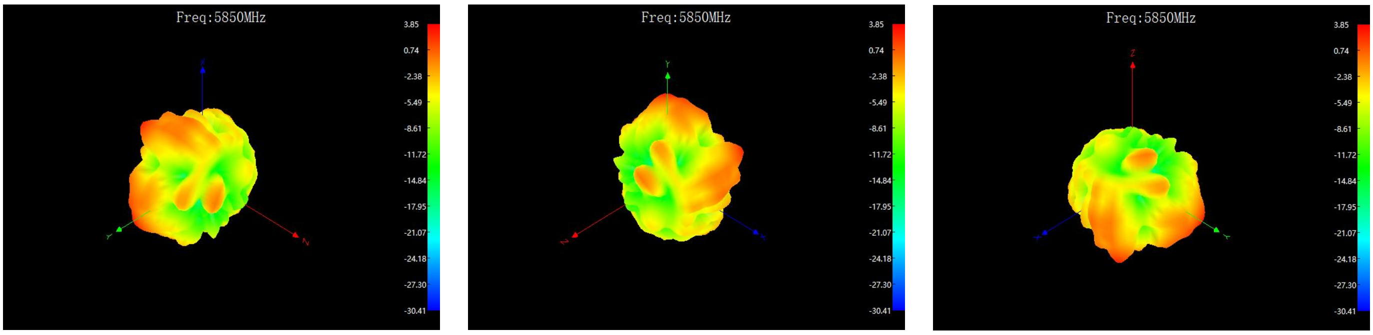




3D 5550:



3D 5850:



Product Type		1.13 Wire
Structure Drawing		
Structure Characteristics		
Structure	Item	Standard Value
Inner Conductor	Material	Silver plated copper wire
	(mm/Composition(No./mm)	7/0.08±0.005
	Nom.Dia(mm)	Φ0.24±0.01
Insulation	Material	FEP
	Nom.Dia(mm)	Φ0.7±0.03
Outer Conductor	Material	Tinned copper
	From	Weaving
	Shielding rate	≧90%
	Nom.Dia(mm)	Φ0.92±0.03
Jacket	Material	FEP
	Nom.Dia(mm)	Φ1.13±0.05

电气性能 Electrical Characteristics				
Item	Standard Value	Item	Frequency	Standard Value
Impedance (Ω)	50±3	Attenuation@20℃ (dB/100m)	1GHz	≤2.23
Capacitance(pF/m)	98		2GHz	≤3.15
Tensile strengthkgf/mm²	1.76		3GHz	≤3.96
VSWR	≤1.40@0-6GHz		4GHz	≤4.6
Dielectric Strength (A.C V/1min)	1000		5GHz	≤5.15
(MHz) Max.oper. frequency	6000		6GHz	≤5.7

Dependability		
Min.Bending Radius/Single	mm	4
Min.Bending Radius/Repeated	mm	8
Operating Temperature	℃	-20~+80

Packing	
Packing Mode	1000 (m/disc)Reel

Trips for Use	
Storage Environment	Temperature: below 30℃, humidity: 20-65%
Teflon Shrink	Insulation shrinkage ≦0.2mm; Sheath shrinkage ≦0.3mm
Processing temperature	Under the condition of 250℃~260℃, it can withstand for a short time; Thermal decomposition occurs above 300℃
The best save cycle	After 2 months, the effect of tin becomes worse after 2 months, but the soon as possible after peeling in the high temperature and high humidity environment in summer

Material RoHS conformity declaration form

This is to certify that the delivery to your company's components, raw materials, auxiliary materials used and the additives in the production engineering are accord with RoHS environmental requirements of the restrictions on the use of hazardous substances directive (RoHS directive 2011/65 / EU)

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

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
PCB	PCB	CANEC2221844502	SGS	22/10/20	ND	12	ND	ND	ND	ND	PASS
Wire rod	Coaxial cable	CANEC2301851703	SGS	23/02/23	ND	ND	ND	ND	ND	ND	PASS
Eco-friendly tin wire	Eco-friendly tin wire	SHAEC23006357502	SGS	23/05/23	ND	43	ND	ND	ND	ND	PASS
terminal	Phosphor bronze	CANEC2301145810	SGS	23/02/08	ND	5	ND	ND	ND	ND	PASS
	Gold coating	A2230400553101001E	CTI	23/08/12	ND	ND	ND	ND	ND	ND	PASS
	Rubber core	A2230035037101002E	SGS	23/02/06	ND	ND	ND	ND	ND	ND	PASS