

specification

Customer : 优品电子

Customer P/N: 350-14122400-882-9

Part Name: BUILT IN ANTENNA

HJ P/N: 3N0701LG-011

Spec Description : 1.13 SILVER TIN WIRE GRAY+3PIN
CONNECTOR SLEEVE WITH WHITE
H.S.TUBE,L=185mm

Prepared Date: 2025/5/6

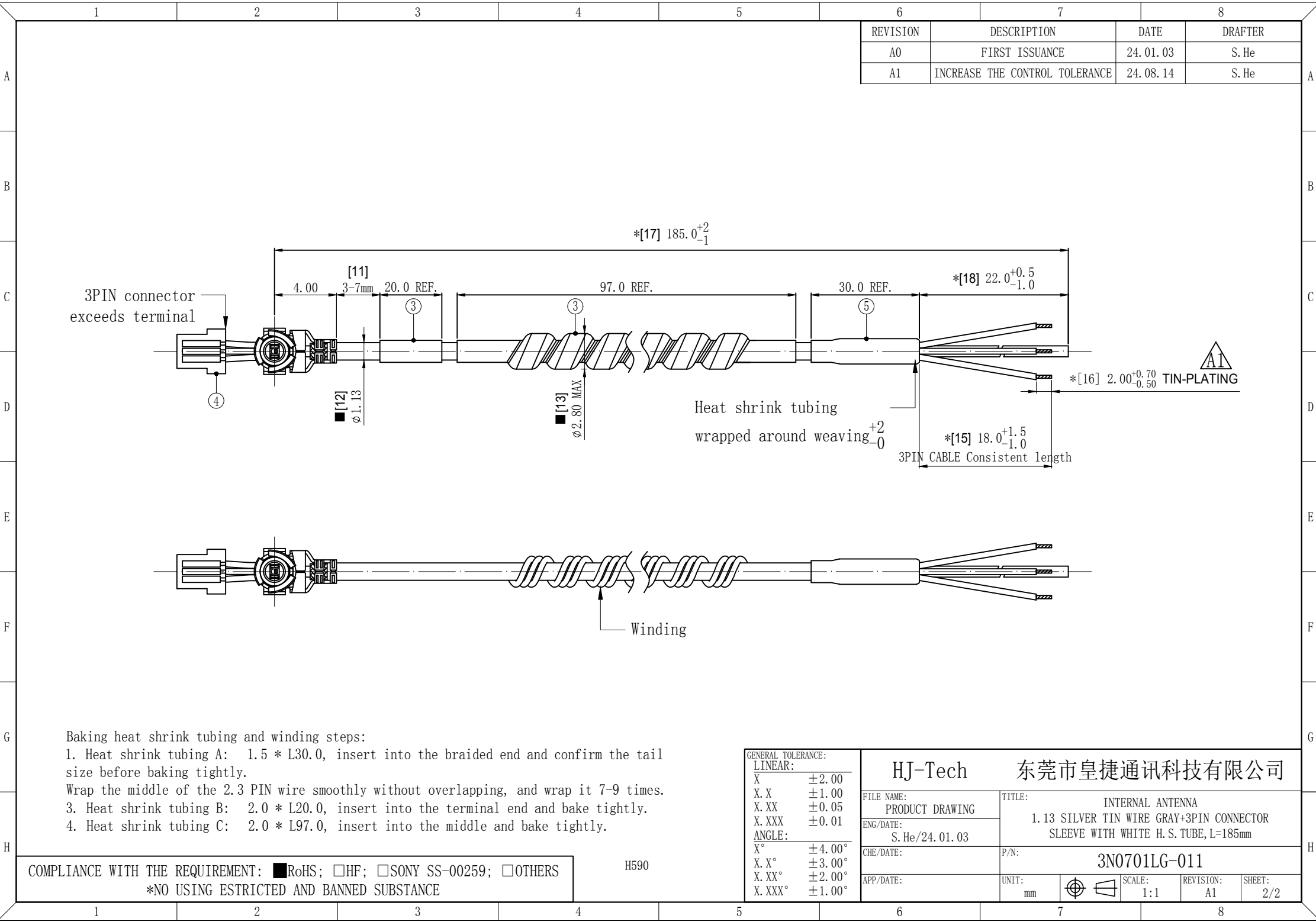
Signature			
Customer		Supplier	
Confirmed by		Prepared by	S. He
Approved by		Checked by	XIU HE
		Approved by	LIU FONG YONG

东莞市皇捷通讯科技有限公司

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A	1	2	3	4	5	6		7		8	
						REVISION	DESCRIPTION		DATE	DRAFTER	
						A0	FIRST ISSUANCE		24.01.03	S. He	
						A1	INCREASE THE CONTROL TOLERANCE		24.08.14	S. He	
B											
C											
D											
E											
F	Technical requirements: Direction 1 requirement: As shown in Figure 3, the 3P wire is located on the back of the terminal. 2 Electrical characteristics: Characteristic impedance: 50 ohms; Applicable frequency range: 2.412-2.483GHz; 3 Inspection method: Single test antenna, use network analyzer to compare 100% with Gold sample waveform test. 4-terminal pull-out force test: minimum 1.30kgf. Test method: Lift a 1.30kg weight vertically off the table at a speed of 25 ± 3 millimeters per minute along the central axis of the cable, and it is considered qualified. 5. Short circuit and high voltage testing: 100% use a wire comprehensive tester for testing. Test conditions: Short circuit determination value: 2k Ω; DC conduction resistance: maximum 2.00 ohms; Insulation resistance: DC 200V, 0.05 seconds, 50M Ω. 6 Dimensional inspection: [*] is the FAI inspection item* For key testing projects; ■ It is a CPK controlled project. 7 Appearance inspection: visual inspection. The surface of the product must not have scratches, damages, or dirt; The coating should have a bright and uniform color, without oxidation. 8 Packaging specifications: 100pcs/bundle 9 Environmental requirements: The product and the materials used must comply with RoHS requirements.					5	2TA015WT0-000	H. S. TUBE: 1.50, HF, 125H2, WHITE	1	30mm	
G						4	N. D	3PIN CABLE: 3P 0.8 WTB IDC+32AWG Ø0.38	1	194.5mm	
						3	2TA020WT0-000	H. S. TUBE: 2.00, HF, 125H2, WHITE	1	20 & 97mm	
						2	2LM10P113210	MHF I PLUG FOR OD1.13 CABLE	1	---	
						1	2C5M11311LG1	OD1.13: SILVER TIN WIR, 50 Ω, GRAY	1	---	
H	No.		PART NUMBER	PART NAME & DESCRIPTION		Q' TY	REMARKS				
	GENERAL TOLERANCE:			HJ-Tech 东莞市皇捷通讯科技有限公司							
	LINEAR:										
		X	±2.00	FILE NAME:	INTERNAL ANTENNA						
	X. X	±1.00	PRODUCT DRAWING	1.13 SILVER TIN WIRE GRAY+3PIN CONNECTOR							
	X. XX	±0.05	ENG/DATE:	SLEEVE WITH WHITE H. S. TUBE, L=185mm							
	X. XXX	±0.01	S. He/24.01.03								
	ANGLE:			CHE/DATE:		P/N:					
	X°	±4.00°	3N0701LG-011								
	X. X°	±3.00°									
	X. XX°	±2.00°									
	X. XXX°	±1.00°									
	H590					APP/DATE:	UNIT:		SCALE:	REVISION:	SHEET:
							mm	1:1	A1	2/1	
	1	2	3	4	5	6	7	8			



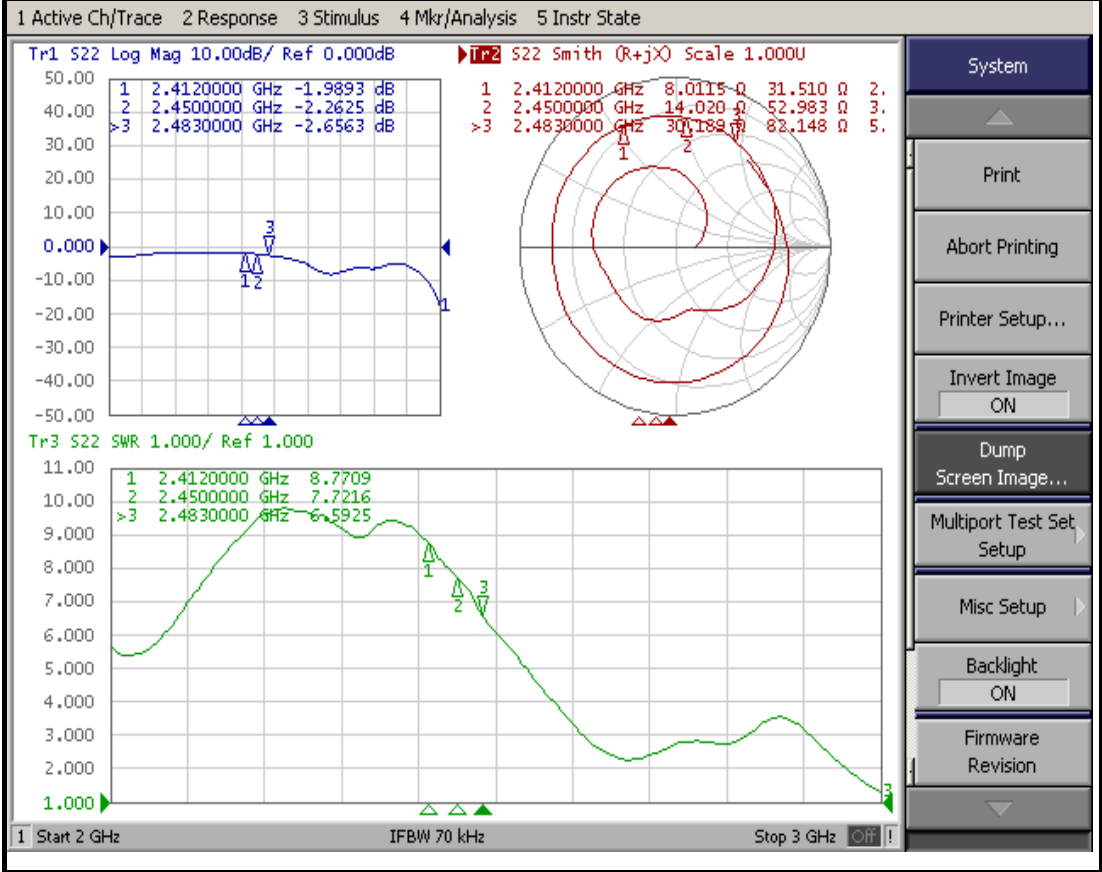


Antenna Electrical Characteristic Test Report

NETWORK ANALYZER TEST REPORT

Doc No.:HJ-QR-Q-22 Rev:A0

Part Number:	3N0701LG-011	Item	Spec	Judge
Part Name:	1.13 SILVER TIN WIRE GRAY+3PIN CONNECTOR SLEEVE WITH WHITE H.S.TUBE,L=185mm	Characteristic impedance	50Ω	pass
Test Equipment	NETWORK ANALYZER			
Q uantity	5pcs			
Test Date	2025/5/6			



Checker: XIU HE

Tester: S.He



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Antenna Electrical Characteristic Test Report

ANECHOIC CHAMBER TEST REPORT

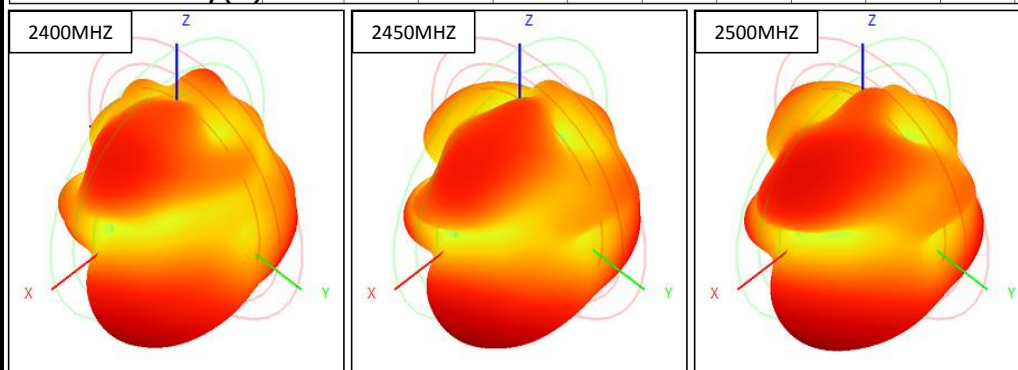
Doc No.:HJ-QR-Q-22 Rev:A0

Part Number:	3N0701LG-011	Item	Spec	Judge
Part Name:	1.13 SILVER TIN WIRE GRAY+3PIN CONNECTOR SLEEVE WITH WHITE H.S.TUBE,L=185mm	Characteristic impedance	50Ω	pass
Test Equipment	ANECHOIC CHAMBER			
Q uantity	5pcs			
Test Date	2025/5/6			



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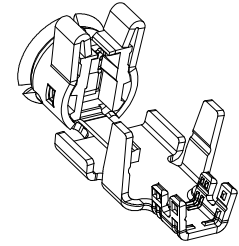
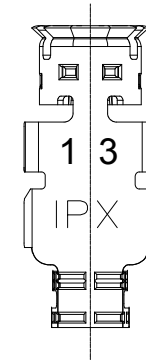
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-9.07	-9.05	-8.86	-8.76	-8.59	-8.37	-8.18	-8.01	-7.69	-7.66	-7.51
Gain (dBi)	-2.43	-2.33	-2.16	-2.08	-2.02	-1.95	-1.85	-1.70	-1.30	-1.17	-1.04
Efficiency (%)	12.39	12.46	12.99	13.32	13.85	14.57	15.22	15.79	17.03	17.14	17.76
Directivity (dB)	6.64	6.71	6.70	6.67	6.57	6.42	6.32	6.32	6.39	6.49	6.47
Peak Gain Position (Theta)	128.00	128.00	128.00	128.00	127.00	126.00	125.00	122.00	121.00	120.00	119.00
Peak Gain Position (Phi)	13.00	14.00	14.00	14.00	14.00	16.00	17.00	18.00	19.00	20.00	20.00
Efficiency ThetaPol (%)	8.66	8.75	9.12	9.35	9.69	10.15	10.56	10.89	11.69	11.77	12.22
Efficiency PhiPol (%)	3.73	3.71	3.86	3.97	4.15	4.41	4.66	4.90	5.34	5.37	5.53
Upper Hem. Efficiency (%)	3.19	3.13	3.26	3.38	3.50	3.82	4.08	4.32	4.82	4.82	5.02
Lower Hem. Efficiency (%)	9.20	9.33	9.73	9.94	10.34	10.75	11.14	11.48	12.20	12.32	12.74



Checker: XIU HE

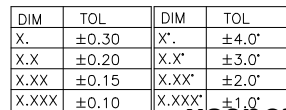
Tester: S.He

		DRAW NO.		DATE	DRAW NAME:				
		DESIGN:	Mark	2012.08.28	1.13 I-PEX 1代 (内置高仿)				
TOL		CHECK:			FILE:		P/N NO.		
±4.0"					MODEL:		2LM10P113210		
±3.0"							UNIT:	SHEET:	
±2.0"									
±1.0"		APPROVED:			REV. A0	SCALE	N/A	mm	N/A



NOTE:

1. 塑胶材料: PBT热塑性塑胶 黑色;
HOUSING MATERIAL: THERMOPLASTIC PLASTIC, UL 94V-0,BLACK;
端子材料: 铜合金, 表面镀金;外壳
CONTACT MATERIAL: COPPER ALLOY, GOLD PLATED ALL OVER;
材料: 铜合金, 表面镀金;
SHELL MATERIAL: COPPER ALLOY, GOLD OR NICKEL PLATED ALL OVER;
2. 产品性能:
PERFORMANCE:
- 2.1. 接触阻抗: 20m Ω Max.
CONTACT RESISTANCE: 20m Ω HM Max.
- 2.2. 耐电压: 200V AC, 1 Minute;
DIELECTRIC WITHSTANDING VOLTAGE: 200V AC FOR 1MINUTE;
- 2.3. 绝缘阻抗: 500M Ω Min.
INSULATION RESISTANCE: 500M Ω HM Min.
- 2.4. 插拔耐久性: 30次 Min.
DURABILITY: 30TIMES Min.
- 2.5. 公母对插保持力: 5N Min.
DURABILITY: 5N Min.



型号 Type		RF-1.13/50	料号 P/N		2C5M11311LG1 (GRAY)		
结构图 Structure drawing							
结构特性 Structure characteristics							
结构 Structure		项目 Item		标准值 Standard value			
①内导体 Inner conductor		材料 Material		镀银铜线 Silverplated copper wire			
		组成:总根数/单根外径(mm) Makeup:total / O.D. of every wire(mm)		7/0.08			
		(绞合)标称外径(mm) (Intertwist)NOM.O.D.(mm)		0.24±0.02			
②绝缘层 Insulation		材料 Material		聚全氟乙丙烯/FEP			
		颜色 Color		本色 Natural			
		标称外径(mm) NOM.O.D.(mm)		0.7±0.03			
③外导体 Outer conductor		材料 Material		镀锡铜线 Tinned copper wire			
		组成:总根数/单根外径(mm) Makeup:total / O.D. of every wire(mm)		16/4/0.05			
		标称外径(mm) NOM.O.D.(mm)		0.92±0.05			
		覆盖率(%) Coverage ratio(%)		90±5			
④护套层 Jacket		材料 Material		聚全氟乙丙烯/FEP			
		颜色 Color		灰色 GRAY			
		标称外径(mm) NOM.O.D.(mm)		1.13±0.05			
电性能特性 Electrical characteristics							
项目 Item		标准值 Standard value		项目 Item		标准值 Standard value 单位 Unit:dB/m	
电容(pF/m) Capacitance(pF/m)		98		衰减 Attenuation		1GHz	≤2. 2
速率(%) Velocity(%)		70				2GHz	≤3. 1
阻抗(Ω) Impedance(Ω)		50±3				3GHz	≤3. 8
驻波比 Standing wave ratio		≤1.3@0~6GHz				4GHz	≤4. 4
最大工作电压(V) Max.operating voltage(V)		1000				5GHz	≤4. 9
最大工作频率(GHz) Max.operating frequency(GHz)		6				6GHz	≤5. 4
可靠性 Dependability							
项目 Item			单位 Unit		标准值 Standard value		
最小弯曲半径(一次) Min.bending radius static			mm		4		
最小弯曲半径(重复) Min.bending radius repeated			mm		—		
工作温度范围 Operating temperature			℃		-55~+150		
使用提示 Use tips							
存储环境 Storage environment			温度：30℃以下；湿度：20%~65%				
加工温度 Processing temperature			260℃的极限情况下，可短时间承受；300℃以上分子通常带有的等端基会分解；400℃以上发生显著的热分解				