

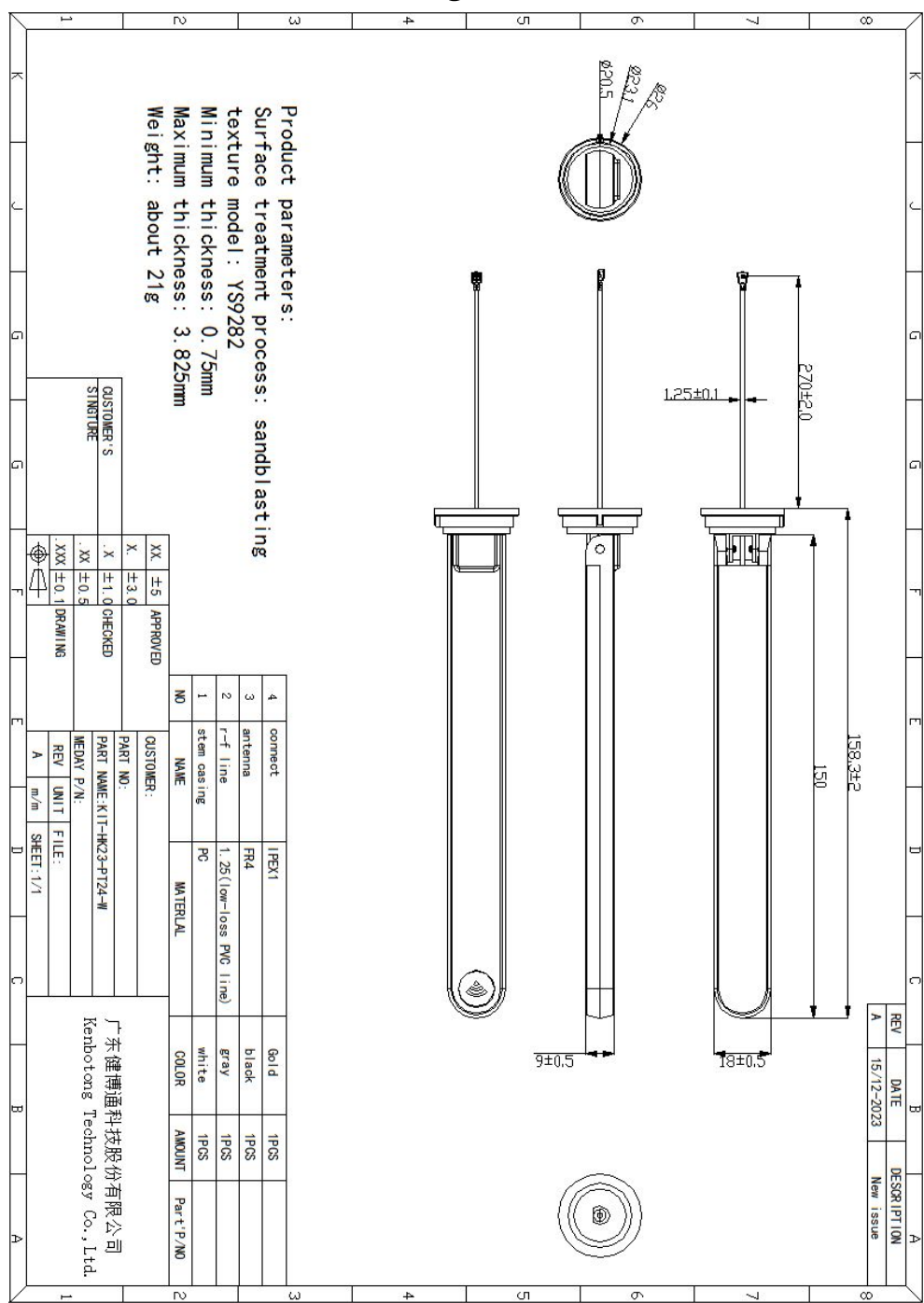
Description Record

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1、Antenna structure drawing (mm)



2、Antenna physical image

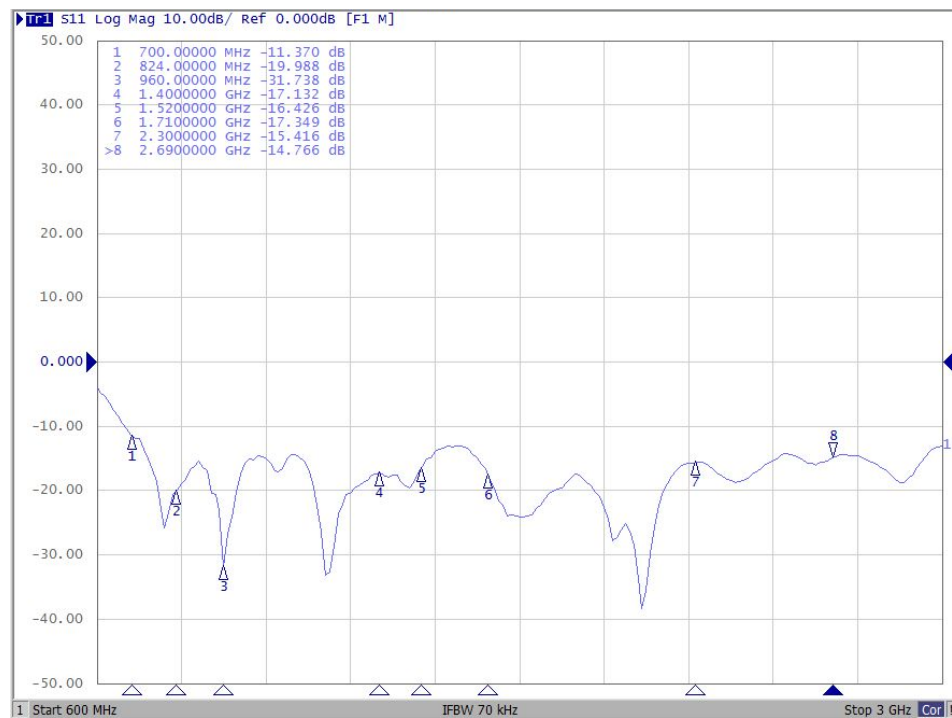
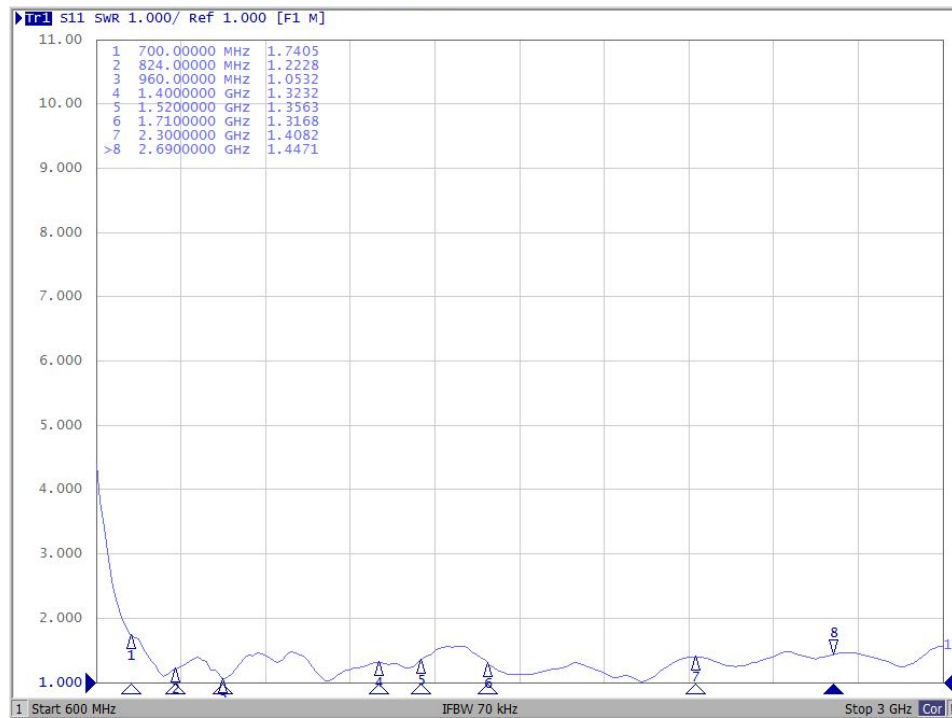


3、 Antenna property table

Parameter	
Antenna	External rubber rod omnidirectional antenna
working Frequency	700-960/1400-2700
VSWR	≤2.5
impedance	50
Radiation Parameter	
Gain	-0.19-4.57
Antenna efficiency	34.12-71.45
Polarization	Linear polarization
Axial Ratio	/
Radiation pattern	Omnidirectional
Mechanical Parameter	
Cable material	PVC
Interface	IPEX-1
Overall dimensions	158.3*18
Weight	22g
Glue model	Customized adhesive
Detection Parameter	
Ingress Protection rating	IP67
Air tightness	50Kpa/10S without leakage（Full inspection）
Environment Parameter	
Operation Temp	-45-75
Storing Temp	-45-75

4、Antenna performance testing

1、SWR&Return loss



2、Efficiency

Frequency / MHz	Gain/ dB	Efficiency / %	Frequency / MHz	Gain/ dB	Efficiency / %	Frequency / MHz	Gain/ dB	Efficiency / %
700	3.79	42.95	940	2.94	61.52	1610	4.2	65.61
710	3.85	43.25	950	2.93	62.81	1620	3.32	62.37
720	3.19	40.36	960	3.02	62.09	1630	3.09	62.09
730	2.51	37.5	1400	2.68	62.95	1640	2.78	62.81
740	2.31	37.33	1410	3.71	67.76	1650	3.12	66.53
750	1.6	34.59	1420	3.08	62.52	1660	2.46	60.26
760	1.39	34.12	1430	3.9	68.08	1670	2.76	60.95
770	0.74	36.31	1440	3.64	66.83	1680	2.66	59.02
780	0.82	38.73	1450	4.43	71.45	1690	2.99	62.95
790	0.87	39.81	1460	3.86	64.86	1700	2.68	60.81
800	-0.19	39.45	1470	4.3	67.45	1710	2.59	61.8
810	0.89	42.85	1480	4.22	66.53	1720	2.46	58.34
820	1.51	46.88	1490	4.36	66.07	1730	2.21	58.61
830	2.22	51.29	1500	4.25	64.42	1740	2.37	57.68
840	2.76	54.33	1510	4.17	62.52	1750	2.37	58.61
850	2.57	56.75	1520	4.52	65.61	1760	2.68	58.48
860	2.5	55.98	1530	4.42	63.68	1770	2.37	58.48
870	1.98	55.46	1540	4.59	64.71	1780	2.79	59.29
880	1.97	54.83	1550	4.24	61.52	1790	1.96	57.68
890	1.89	55.21	1560	4.41	65.01	1800	2.9	59.57
900	2.03	55.21	1570	4.33	65.16	1810	2.28	56.75
910	2.46	57.28	1580	4.48	67.76	1820	2.89	57.02
920	2.72	58.61	1590	4.39	65.01	1830	2.75	57.28
930	3.13	60.95	1600	4.43	67.3	1840	3.64	61.38

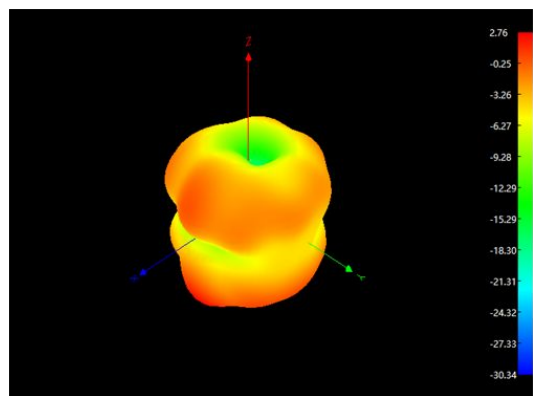
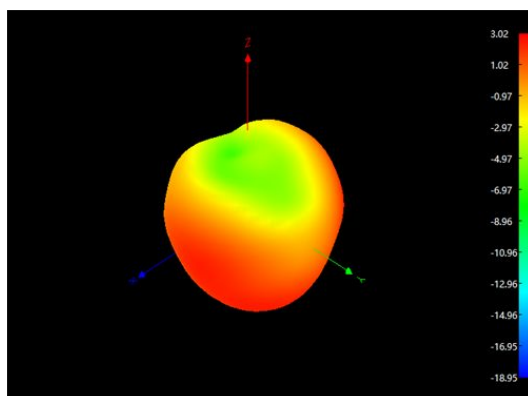
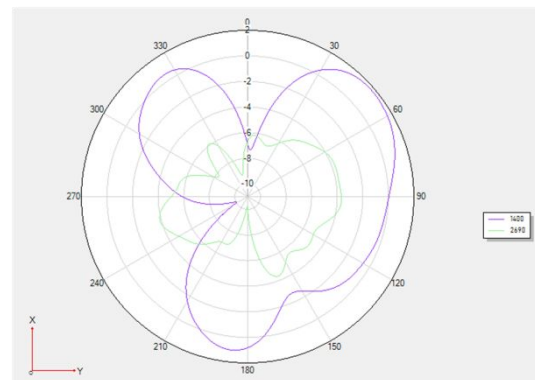
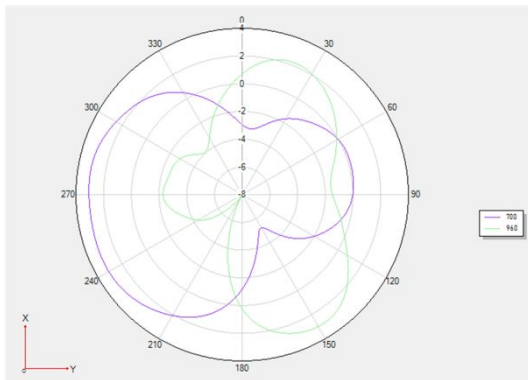
Frequency / MHz	Gain/ dB	Efficiency / %	Frequency / MHz	Gain/ dB	Efficiency / %	Frequency / MHz	Gain/ dB	Efficiency / %
1850	3.62	61.66	2100	3.01	57.54	2290	2.11	55.08
1860	4.09	62.95	2110	2.85	54.08	2300	2.59	60.12
1870	4.11	65.46	2120	3.27	57.02	2310	2.62	56.49
1880	4.55	67.61	2130	3.3	52.24	2320	2.79	57.28
1890	4.52	69.98	2140	4	57.28	2330	2.92	56.23
1900	4.57	70.47	2150	3.61	55.08	2340	3.15	62.23
1910	4.48	73.28	2100	3.5	57.02	2350	2.91	59.16
1920	4.23	71.29	2110	3.08	55.46	2360	3.13	61.09
1930	4.22	72.44	2120	3	55.72	2370	2.83	59.43
1940	4.22	70.15	2130	2.68	53.33	2380	3.18	63.39
1950	4.37	71.78	2140	2.61	52.97	2390	3.1	60.95
1960	4.3	67.3	2150	2.74	54.95	2400	3.17	63.39
1970	4.19	66.68	2160	2.66	54.58	2410	3.16	59.43
1980	4.14	65.61	2170	2.55	54.08	2420	2.95	59.98
1990	4	64.27	2180	2.41	53.7	2430	2.88	57.41
2000	3.76	60.81	2190	2.46	57.54	2440	2.92	60.81
2010	3.51	59.16	2200	2.72	58.48	2450	3.12	60.39
2020	3.65	61.09	2210	2.21	57.41	2460	3	59.43
2030	3.2	57.68	2220	2.51	56.75	2470	3.09	59.16
2040	3.16	56.1	2230	3.01	57.54	2480	3.28	61.52
2050	2.84	52.12	2240	2.85	54.08	2490	3.39	62.23
2060	3.25	57.28	2250	3.27	57.02	2500	3.64	62.23
2070	3.12	56.75	2260	3.3	52.24	2510	3.41	62.81
2080	3.22	59.16	2270	4	57.28	2520	3.53	64.12
2090	2.72	52.84	2280	3.61	55.08	2530	3.23	65.77

Frequency / MHz	Gain/ dB	Efficiency / %
2540	3.51	64.57
2550	2.94	63.24
2560	3.35	64.71
2570	2.93	65.16
2580	3.18	65.46
2590	2.59	62.95

Frequency / MHz	Gain/ dB	Efficiency / %
2600	3.16	66.83
2610	2.59	64.42
2620	2.78	65.16
2630	2.39	63.39
2640	2.65	65.31
2650	2.17	61.8

Frequency / MHz	Gain/ dB	Efficiency / %
2660	2.23	61.09
2670	2.94	61.09
2680	2.9	60.81
2690	2.76	58.34
2700	2.68	58.08

3、Directional diagram



1、Cable specifications

Shenzhen Coaxial Communication Technology Co., Ltd
2nd Floor, Building 62 Baotong South Road, Xikeng Community, Henggang Town, Shenzhen
Tel:(755)28211693 **Fax:(755)89737181**

Product specification



Material code: 811303001/02
Product name: coaxial cable
Product model: RF1.25 Double Tin PVC Grey
Specifications: 7/0.08TC
Specifications: 7/0.08TC

version number	Revision date	revised contents	Revised	date of issue
A	2020-03-01	new increase		2023-11-23
B				
C				
D				
E				
F				
Preparation		auditor	approver	
luoxianwei		zengxiaoquan		

1. Product descripti

1.1 This product is soft Teflon insulation series coaxial cable. Is suitable for the microwave equipment, wireless communication systems and equipment.

1.2 Product features: Excellent flexi-ability, good V.S.W.R, good shielding performance.

2. Cable with data and structure diagram:

2.1 structure diagram



导体 绝缘 包带 编织 护套

2.2 Specification of cable:

Item		NO	Materials and size
① Inner conductor	Material	/	Tinned copper wire
	Composition	mm	7/0.08±0.02
	外径 OD	mm	Φ0.24
② Insulation	Material	/	Teflon FEP (200 degrees of fluorinated ethylene propylene resin)
	Thickness	mm	0.21
	OD	mm	Φ0.68±0.03
	Color	/	transparent color
③ Tape	Material	/	Copper foil
	O.D	mm	Φ0.73
④ Outer conductor	Material	/	Tinned copper wire
	Form	/	16*4*0.05 Weave
	Density	%	93%(25 mesh (Mesh); 64 parts (Coding 16*4/0.05mm))
	OD	mm	Φ0.95±0.05
⑤ Jacket	Material	/	PVC (polyvinyl chloride)
	Thickness	mm	0.125
	OD	mm	Φ1.25±0.05
	color of sheath	/	Gray or black (Can also be processed according to customer requirements)

3. The cable properties

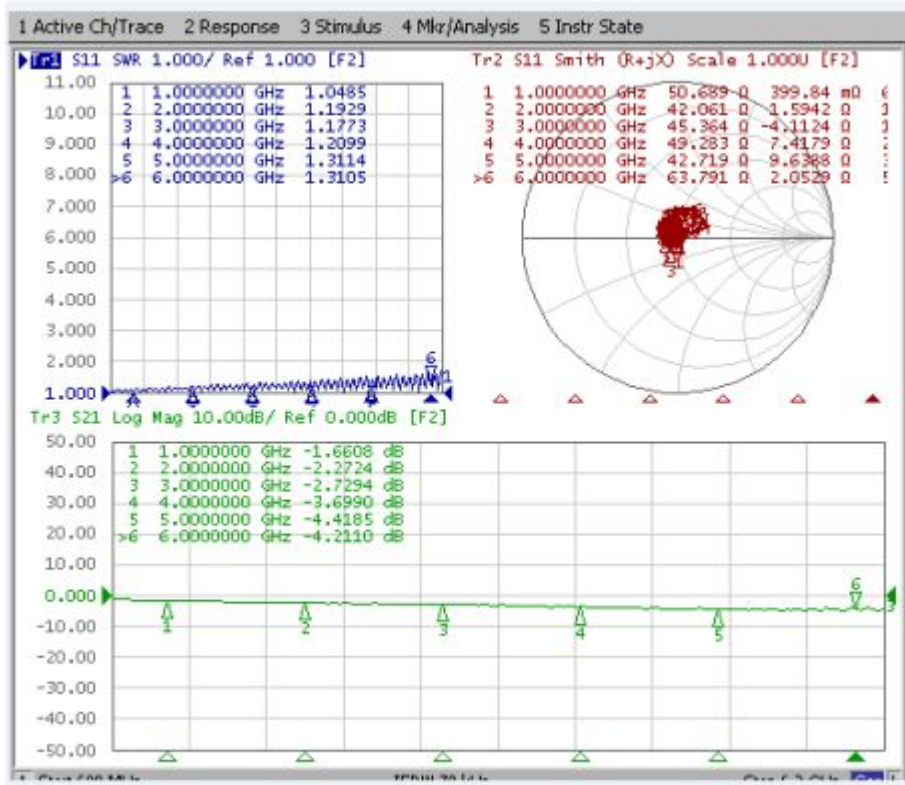
3.1 Electrical properties



test project	Standard value		Note
Rated temperature / voltage	$-15^{\circ}\text{C}\sim+75^{\circ}\text{C}$ / 30V		/
Insulation resistance	3000M Ω . Km		Resistance tester
Conductor resistance	482 Ω /Km 20 $^{\circ}\text{C}$		/
Pressure	2KV		Withstand voltage tester
Insulation	Unaged	Tensile Strength	2500 PSI MIN. (1.76Kg/mm ²)
		Elongation	200% MIN
	Aged	Tensile Strength	2500 PSI*75% (168HRS*232 $^{\circ}\text{C}$)
		Elongation	200% MIN*75% (168HRS*232 $^{\circ}\text{C}$)
Jacket	Unaged	Tensile Strength	2500 PSI MIN. (1.76Kg/mm ²)
		Elongation	200% MIN
	Aged	Tensile Strength	2500 PSI*75% (168HRS*232 $^{\circ}\text{C}$)
		Elongation	200% MIN*75% (168HRS*232 $^{\circ}\text{C}$)
characteristic impedance	$50\pm 2\Omega$		Analysis of network analyzer The TRK tester
Capacitance	96 ± 3 PF/M		Digital capacitance meter
Velocity	69%		Analysis of network analyzer
Propagation Delay	4.8ns/m		/
Shielding attenuation	100dB		/
Bending radius	<7mm		/
Flame retardant	passed		VW-1 provides material report
Attenuation (dB/0.1m)	test frequency	Attenuation	Sea level to 20 DEG C test
	1GHz	0.45	
	2GHz	0.55	
	3GHz	0.75	
	4GHz	0.9	
	5GHz	1.25	
	6GHz	1.55	
VSWR	0.3—3GHz	≤ 1.30	
	3—6GHz	≤ 1.55	

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test data:



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