

DONGGUAN HUANGJIE COMMUNICATION TECHNOLOGY CO., LTD.



1.88-1.93G antenna

Gel antenn3D1805BK06-002

- trait:
- The Outward Appearance Fine
 - all weather operations
 - Optimized size
 - Medium gain、 low standing wave

Model NO	3D1805BK06-002
Electric Spec	
Frequency rang-MHz	1.88-1.93G
Bandwidth -MHz	See waveform diagram for details
Gain -dBi	4.33 DBI MAX
VSWR	1.88-1.93G ≤2.0
Impedance-Ω	50
Connector model	TNC PLUG FEMALE Or user specifiedTNC PLUG or others
CABLE Spec	RG178 Cable Or user specified RG178 Cable or others
Mechanical Specification	
Size -mm	205*13
Antenna weight-kg	/
Working Temperature -° c	-40~60
Radome color	black

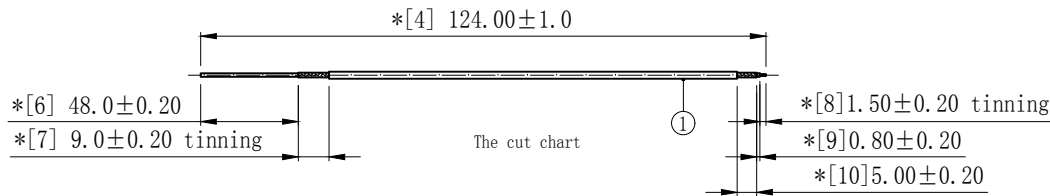
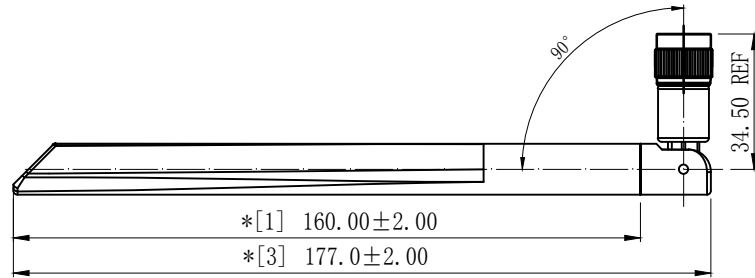
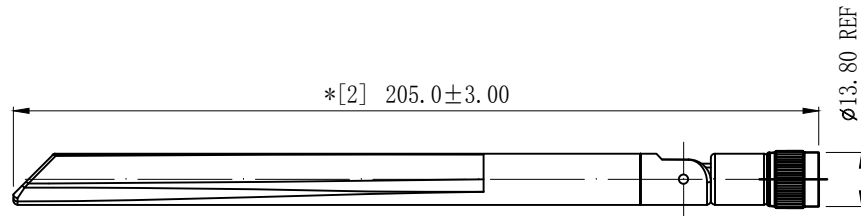
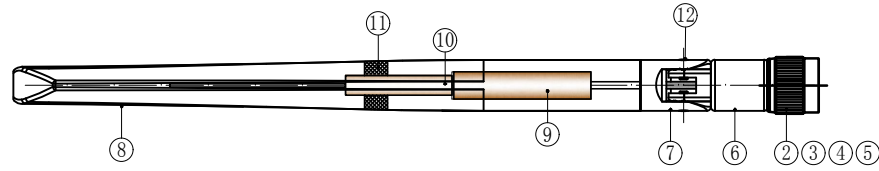
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传真Fax : 0769-83327688

REVISION	DESCRIPTION	DATE	DRAFTER
A0	initial issue	22.09.07	S. He



Technical requirements:

Electrical characteristics: 100% tested by vector network analyzer.

Characteristic impedance :50 Ω; Applicable frequency range: 1.88-1.93G;

Standing wave ratio: Max. 2.00; Gain: 4.33 dbi MAX.

2.Size inspection: [*] is the FAI test item; * is the key test item; ■ CPK controlled items.

Visual inspection: full visual inspection. The surface of the product shall not be scratched, damaged or dirty. The coating color is bright and uniform, without oxidation.

4 Packing specification: 20PCS/ bundle, 5 bundles/package, i.e. 1000PCS/ package. (Estimated packaging, according to the actual)

Environmental protection requirements: products and materials used should meet RoHS requirements.

Joints must be riveted and pressed.

12	2SBKM2802	rivet, OD:2.4*L5.1mm, POM, black	2	---
11	2MH110	L15.0xW10.0xT3.0mm, Sponge one side gum	1	---
10	2YG041	ØD5.0*L27.1 copper pipe, Brass material	1	---
9	2YG132	ØD7.0*L42.5 The assembly of brass, Brass material	1	---
8	2SBKG1800	Dao peak rod set, OD:13.0*L160mm, TPEE, black	1	---
7	2SBKU31R0	CD384 On solid, OD:13.00*L28.2mm, PC, black	1	---
6	2SBKD36R0	CD13 Holes under solid, OD:13.0*L25.3mm, PC+PBT, black	1	---
5	2LC17PF802-6	Insulation grain	1	set
4	2LC17PF802-9	Booster tube, zinc alloy, nickel plating	1	
3	2LC17PF802-5	TNC FEMALE gold-plated	1	
2	2LC17PF802-2	TNC PLUG, Electricity with black	1	
1	2C5R17811BN1	RG178 Transparent brown silver tin wire-50 OHM	1	---
No.	PART NUMBER	PART NAME & DESCRIPTION	Q' TY	REMARKS

GENERAL TOLERANCE:

LINEAR:	
X	±0.20
X.X	±0.15
X.XX	±0.05
X.XXX	±0.01
ANGLE:	
X°	±4.00°
X.X°	±3.00°
X.XX°	±2.00°
X.XXX°	±1.00°

HJ-Tech DONGGUAN HUANGJIE COMMUNICATION TECHNOLOGY CO., LTD.

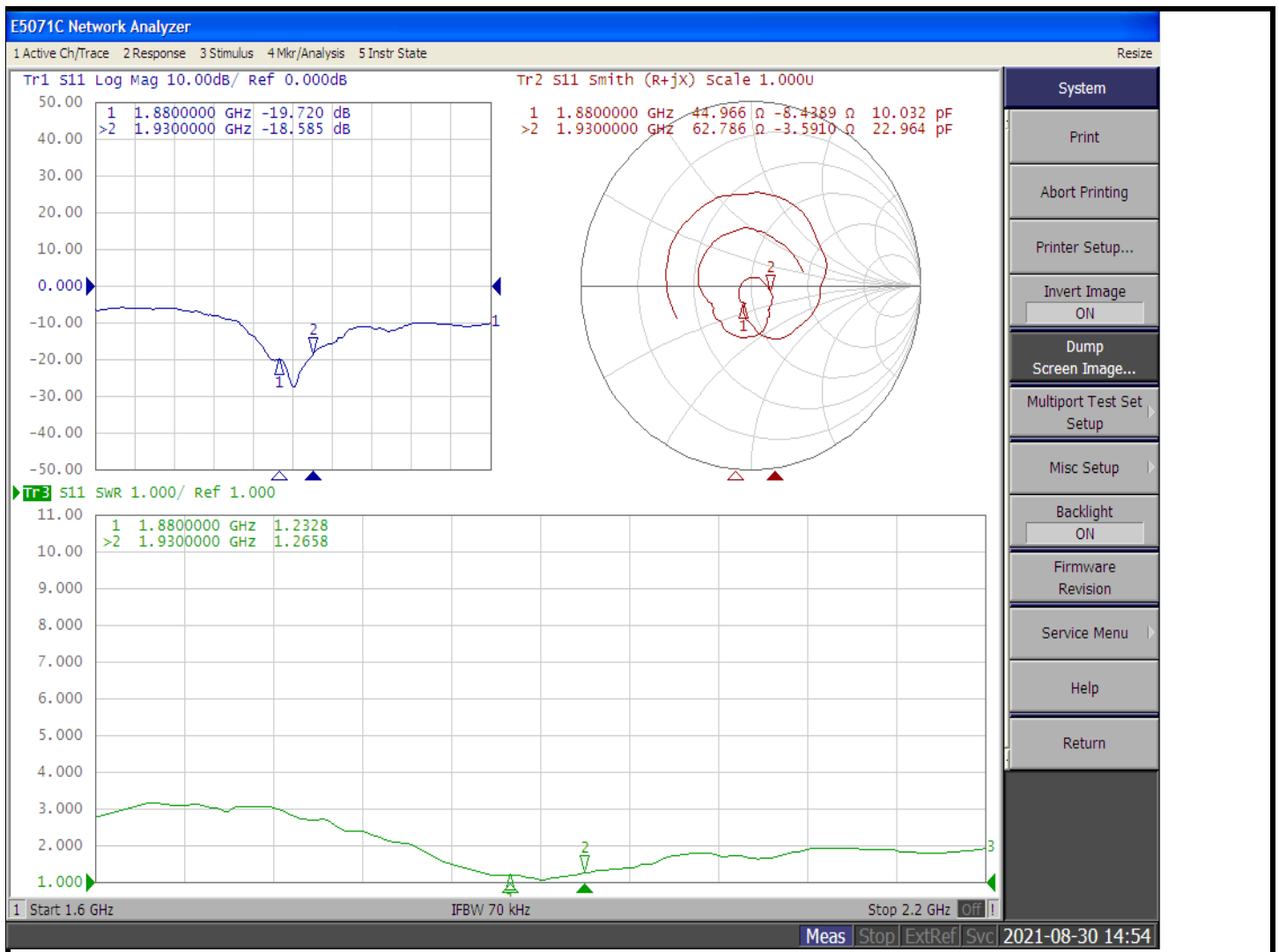
FILE NAME: product drawing	TITLE: Radio frequency antenna assembly, G18 Black, Copper tube + Copper tube, RG178+TNC Male and Female needle (1.88-1.93G), (R35-RF21080-OBM)
ENG/DATE: S. He/22.09.07	P/N: 3D1805BK06-002
APP/DATE:	UNIT: mm
SCALE: 1:1	REVISION: A0
SHEET: 1/1	

COMPLIANCE WITH THE REQUIREMENT: ■RoHS; □HF; □SONY SS-00259; □OTHERS H431
*NO USING ESTRICTED AND BANNED SUBSTANCE

Antenna Electrical Characteristic Test Report

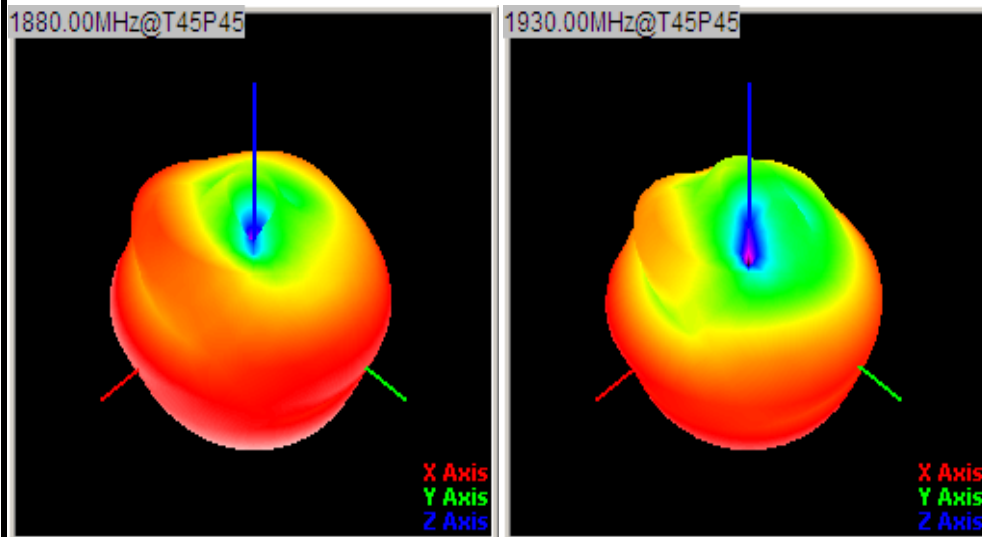
NO:HJ-QR-Q-13/A0

Part Number:	3D1805BK06-002	Item	Spec	Judge
Part Name:	G07 Black, Copper tube + Copper tube, RG178+TNC Male and Female needle (1.88-1.93G)	VSWR	≤ 2.0	pass
Test Equipment	Network analyzer/ microwave anechoic room	Characteristic impedance	50 Ω	pass
Q quantity	5pcs	Gain	0~3dBi	pass
Test Date	2021/8/30			



FETUKEJI

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	1850.0	1860.0	1870.0	1880.0	1890.0	1900.0	1910.0	1920.0	1930.0	1940.0	1950.0
Point Values											
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-0.97	-0.79	-0.94	-0.90	-0.87	-0.96	-1.06	-0.93	-0.97	-0.81	-0.85
Peak EIRP (dBm)	2.77	2.98	2.91	3.11	3.42	3.70	3.94	4.27	4.33	3.55	3.55
Directivity (dBi)	3.75	3.77	3.84	4.01	4.29	4.66	5.00	5.20	5.30	5.36	5.40
Efficiency (dB)	-0.97	-0.79	-0.94	-0.90	-0.87	-0.96	-1.06	-0.93	-0.97	-0.81	-0.85
Efficiency (%)	79.90	83.50	80.60	81.30	81.80	80.20	78.40	80.70	80.00	83.10	82.20
Gain (dBi)	2.77	2.98	2.91	3.11	3.42	3.70	3.94	4.27	4.33	3.55	3.55
NHPRP $\pm\pi/4$ (dBm)	-2.10	-1.92	-2.08	-2.08	-2.11	-2.28	-2.46	-2.38	-2.45	-2.29	-2.35
NHPRP $\pm\pi/6$ (dBm)	-3.51	-3.32	-3.48	-3.49	-3.54	-3.74	-3.95	-3.91	-3.98	-3.81	-3.86
NHPRP $\pm\pi/8$ (dBm)	-4.56	-4.37	-4.54	-4.55	-4.62	-4.83	-5.05	-5.02	-5.09	-4.92	-4.94
Upper Hem. PRP (dBm)	-6.83	-6.68	-6.83	-6.81	-6.89	-7.22	-7.66	-7.88	-8.17	-8.10	-8.09
Lower Hem. PRP (dBm)	-2.28	-2.08	-2.23	-2.18	-2.12	-2.13	-2.13	-1.91	-1.89	-1.70	-1.76
Upper Hem. PRP (%)	20.73	21.48	20.74	20.86	20.47	18.96	17.12	16.28	15.23	15.49	15.52
Lower Hem. PRP (%)	59.18	61.98	59.87	60.48	61.34	61.24	61.25	64.46	64.79	67.58	66.69



Checked by	JIANG NENG GUANG	Tested by	CHU HUAN
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