

SPECIFICATION

Shenzhen Guandetong Electronic Limited



Shenzhen Guandetong Electronic Co., Ltd.

2.4G/5.8G FPC antenna 1.13 black line length 70MM terminals

Product Specification

connection		frequency range	2400-2500MHz 5150-5800MHz
Frequency band wire name		edition	A1
Customer part number		Guandetong part number	
Guandetong No			
R F design		RF Manager	
Structural design		Structure Manager	
Technical Director		Date	

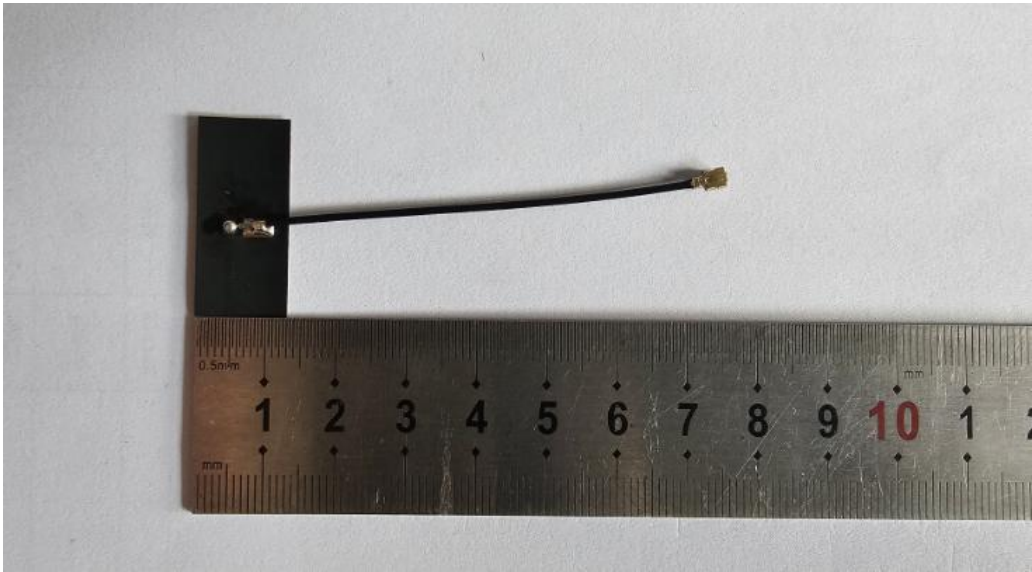
Customer confirmation:

Does the assembly meet your company's requirements: ☐OK ☐NG

catalogue

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一、 Product pictures



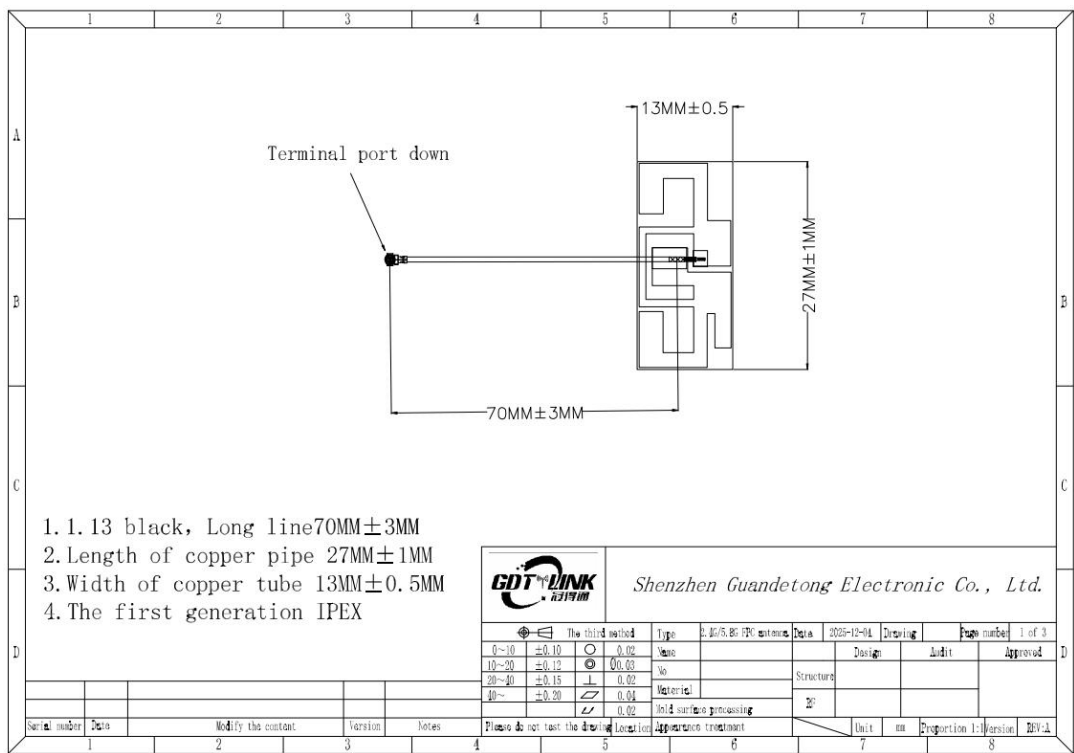
二、 Product parameters

Product testing parameters			
Product name	FPC Antenna	(Model Type)	GDT-DX-70
(Electrical Specifications)			
(Frenquency Range)	2400-2500MHZ 5150-5850MHZ	(Polarization)	perpendicular
(Impedance)	50Ω	Radiation	QXCOMM
(VSWR)	≦2.0	(Power)	50W
(Gain)	2400-2500MHZ:3.54dBi 5150-5850MHZ: 3.99dBi	(Bandwidth	100M
(Mechanical Specifications)			
(Dimensions)	27*13±1mm	(Chassis Color)	Black
(Connector)	IPEX	(Cable Length)	70±3MM
(Chassis Material)	FPC	Wire color	1.13 Black
(Working Temperature)	-40℃-+85℃	(Limit Temperature)	-40℃-+85℃

三、S11(VSWR、Return、Smith)



四、Structural drawings

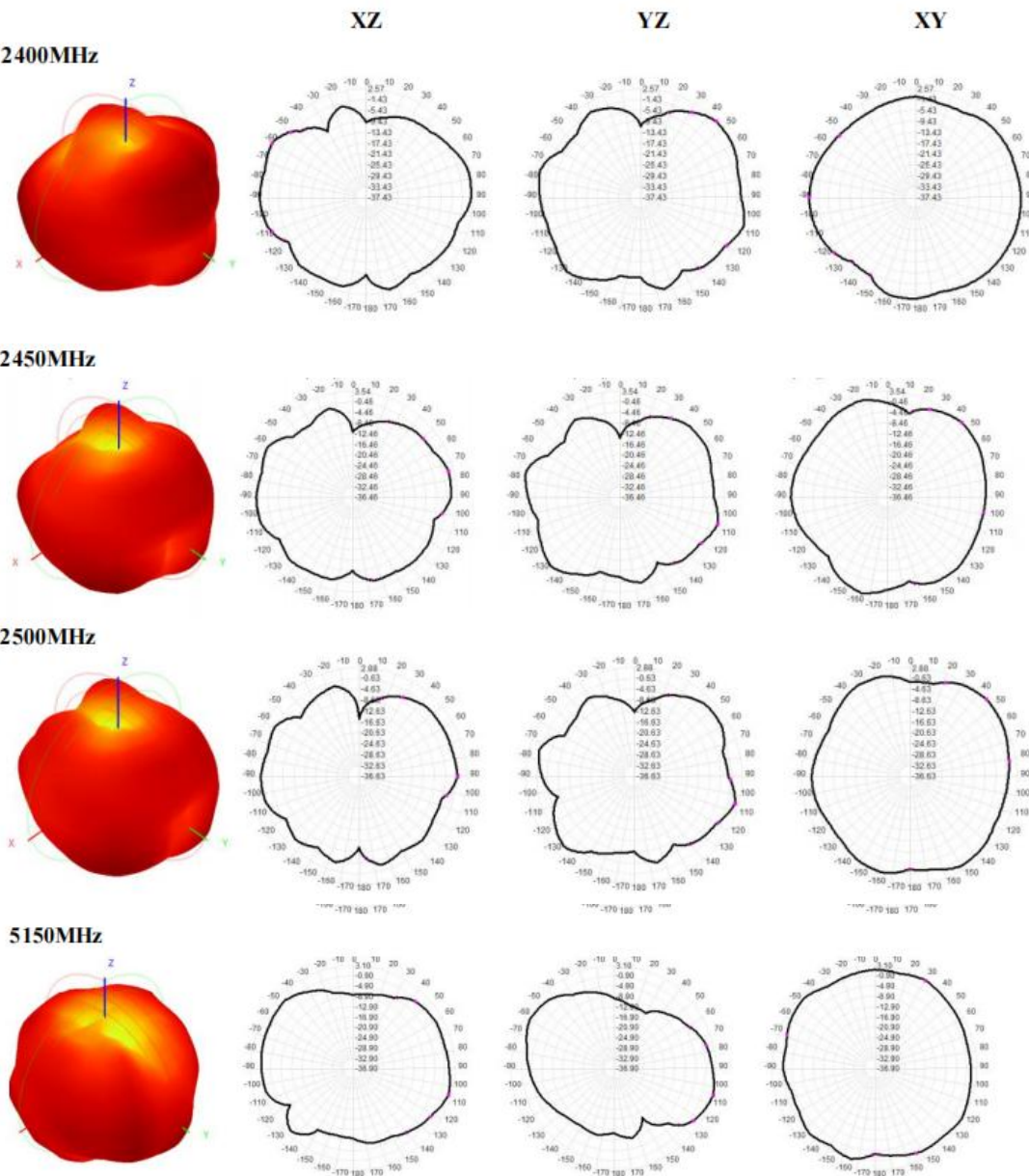


五、Antenna gain and efficiency

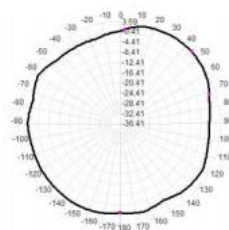
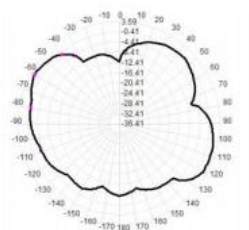
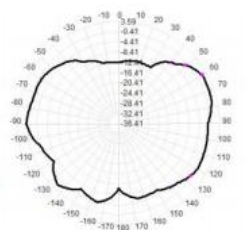
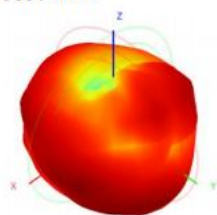
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	2.57	2.73	2.76	2.85	3.06	3.54	3.41	3.25	3.10	2.95	2.88
Efficiency (%)	67.93	68.42	69.25	70.55	71.30	73.08	72.53	71.58	70.01	69.52	68.84

12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
3.10	2.90	2.85	3.00	2.88	3.59	3.68	3.42	3.59	3.68	3.85	3.29	3.69	3.54	3.99
69.39	72.59	69.94	73.93	67.10	71.22	70.90	69.17	71.10	70.77	69.52	67.66	68.84	70.05	66.50

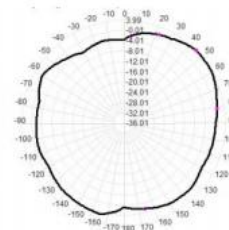
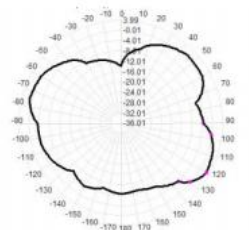
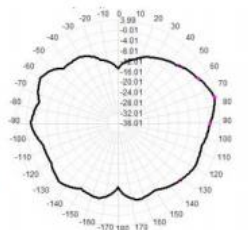
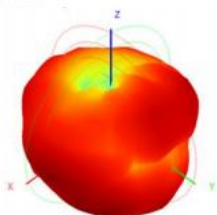
六、2D&3D images



5550MHz



5850MHz



七、Environmental performance test

project	Project test conditions	Specifications
Storage environment	The test temperature, humidity and air pressure are as follows when there is no specific condition: 1. The temperature is - 30 °C~+80 °C 2. Relative humidity: 45% - 85% 3. The air pressure is 86kpa-106kpa	Normal electrical and mechanical performance
High and low temperature test	5 cycles between 70 ° C and 40 ° C, then under normal conditions 1-2H, check the appearance quality.	The size shall meet the requirements and Mechanical and electrical performance
Constant damp heat resistance test	Relative humidity: $95 \pm 3\%$, test temperature: 40 °C. After lasting for 2h, The electrical performance shall be measured within 5 minutes after the test object is taken out, and the test object shall be within the normal range Part 1-2H, check the appearance quality	The size shall meet the requirements and Mechanical and electrical performance
vibration test	Vibration frequency range: 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M/s, frequency sweep cycles: 30 times	Normal electrical and mechanical performance
Drop test	Free fall for 3 times in the direction of mutually perpendicular axes at a height of 1M	Normal electrical and mechanical performance