

Product Specification

FPC antenna

JCT-PWR-BT

APPROVED BY	SIGNATURE	DATE
Mechanical Engineer:	ZHOUYANG	2025-10-27
RF Engineer:	LIGUODONG	2025-10-27
Engineering Manager:	QIZHONGLIN	2025-10-27
Approved By Customer (as required):		

1.0 DESCRIPTIONS AND PART NUMBER;

1.1 DESCRIPTION;

The antenna mounts to the housing of the equipment. And after that, the feed point on the prolongation of metal plate should firmly touch the contact provided on the PCB in the respective area.

1.2 PART NUMBER

Part number	Frequency Band	HH Part Number
	2.4G	

2.0 ELECTRICAL SPECIFICATIONS:

2.1 FREQUENCY BAND

2.4G

2.2 IMPEDANCE - Nominal impedance: 50Ω

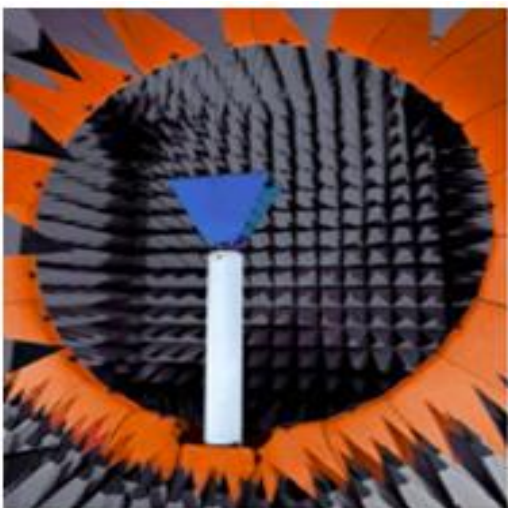
2.3 ACTIVE TEST REPORT

Testing equipment:

E5071C Network analyzer



SG24 Microwave anechoic chamber



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1) Matching circuit

Unchanged

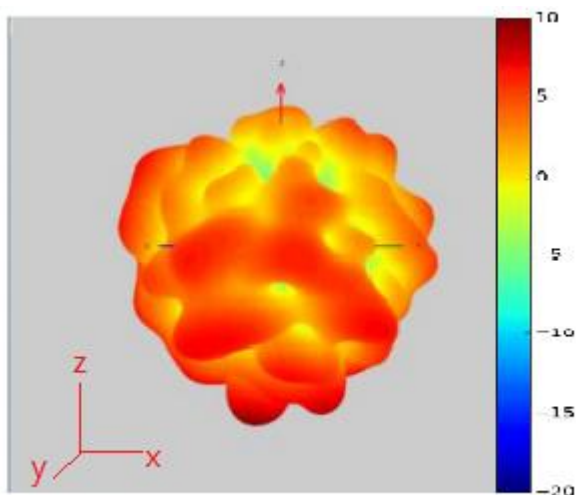
2) Matching circuit

Unchanged

3) Passive result

Gain&Efficiency			
frequency (Hz)	gain (dB)	efficiency (dB)	efficiency
2400M	0.81	-3.75	35.14%
2410M	1.11	-3.73	36.33%
2420M	0.86	-3.87	37.04%
2430M	0.81	-4.04	39.43%
2440M	0.94	-4.16	38.37%
2450M	1.1	-4.09	39.11%
2460M	0.82	-4.46	35.82%
2470M	0.56	-4.63	34.46%
2480M	0.31	-4.77	33.35%
2490M	0.27	-4.81	33.02%
2500M	0.21	-5.06	32.20%

4) Directional pattern



BT 2.4G

3.0 MECHANICAL SPECIFICATIONS:

3.1 MECHANICAL CONFIGURATION

The appearance of the antenna is in accordance with drawing

3.2 CONNECTOR TYPE

The connector type is an embedded type

4.0 ENVIRONMENTAL SPECIFICATIONS

4.1 TEMPERATURE

Operating Temperature Range: -40°C ~ +85°C

Storage Temperature Range: -40°C ~ +120°C

4.2 SALT SPRAY TEST

Antenna be exposed in a 35°C, 5% salt fog chamber for 24 hours then check the appearance and performance against the specifications in normal temperature.

4.3 STATIC HUMIDITY TEST

The antenna is subjected to the following test:

Temperatures: +70°C and 90%--95%RH

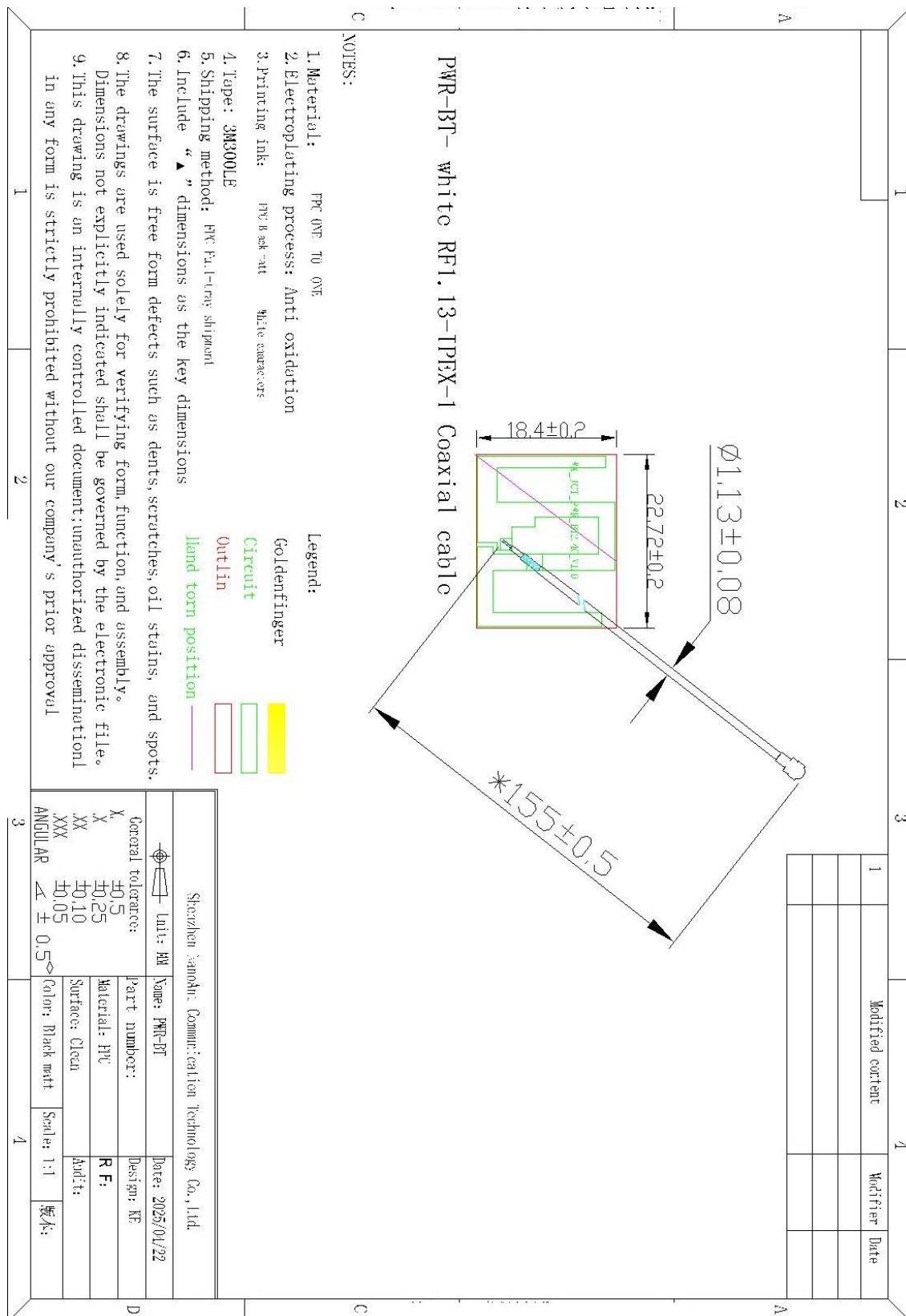
Test Duration: 24 Hours

The antenna should not undergo any structural or functional change and remain within the electrical/mechanical specification.

5.0 PACKAGING

The antennas will be packed in bags, There are 100 or 200 antennas per bag. The bags are packed in corrugated fibreboard over box

Drawing:



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