



ShenZhen HuaDeChang Technology Co., Ltd

Specification

Customer	Shenzhen Lenkeng Technology Co., Ltd
P/N	
Specs	Φ13 5G SMA (M) Antenna Black
Model	H268-10001
Date	2023/6/8

Customer	R&D	ENGINEERING	APPROVED
Manufacturer	APPROVED	CHECKED	MAKED
	Song		Daniel

Product specification

●Electrical Performance:

1. Frequency Range: 5.15GHz~5.825GHz
2. Impedance: 50 Ohms nominal
3. VSWR: ≤ 1.92
4. Admitted power radiation: 1W
5. Radiation of Radiation: Toroidal
6. Radiation: Omni
7. Polarization: Vertical
8. Connector Type: SMA P/R

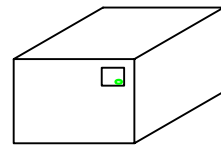
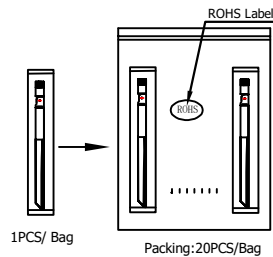
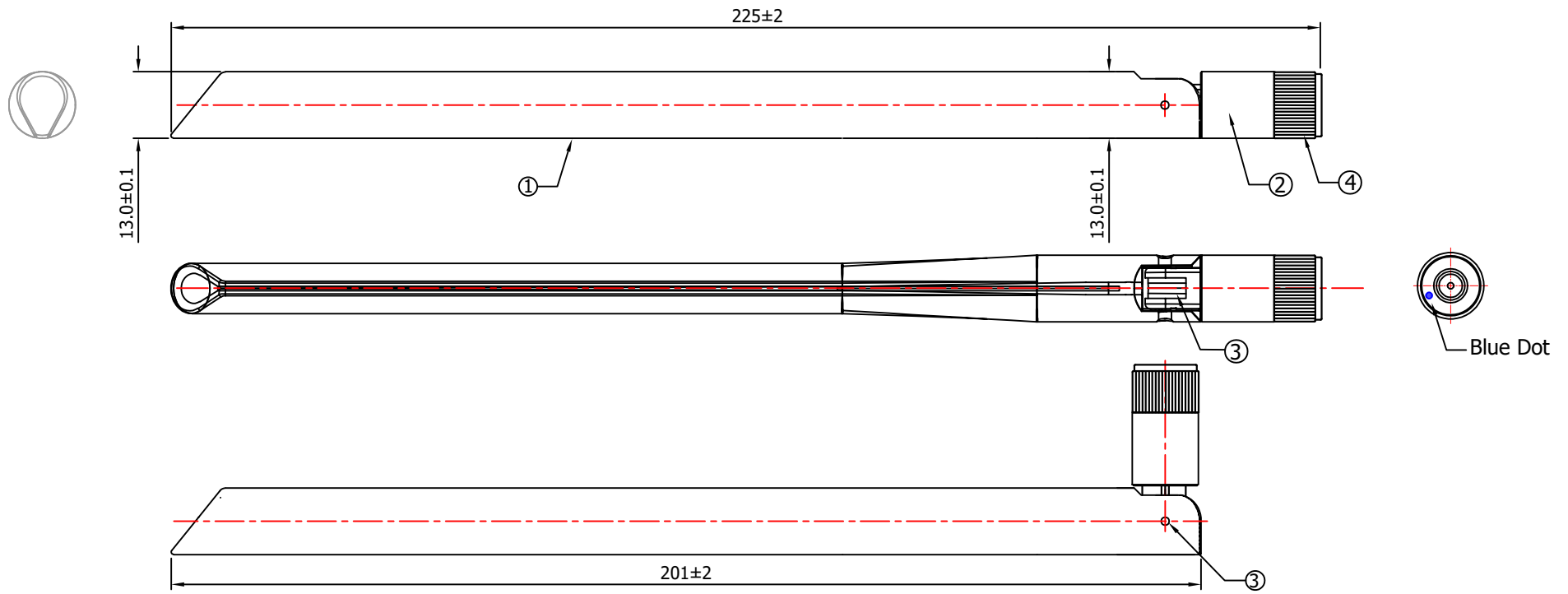
●Mechanical properties:

1. Cable: RG-178, 50 Ohm
2. Operation temperature range: $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$
3. Storage temperature range: $-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$
4. Color: Black

Product Drawing

ROHS



REV.	REVISION	Date
A	NEW ISSUE	2023.06.23



1. Carton should be 1 PCS/ROHS label on the carton label
2. Carton need to post 1 PCS/carton label on the carton side top right corner

Specification:
 Frequency Rang: 5.15GHz~5.825GHz
 Return Loss: -10.0 dB or less
 VSWR: 1.92 Max

NO	DESCRIPTION	Q'TY	REMARK
5	Connector	1	Brass Enclosure
4	Cable	1	RG-178 Cable, Transparency Brown, 50Ω
3	Rivet	2	PBT+PC, Color: Black
2	Upper Base	1	PBT+PC, Color: Black
1	Antenna Cap	1	TPEE, Color: Black

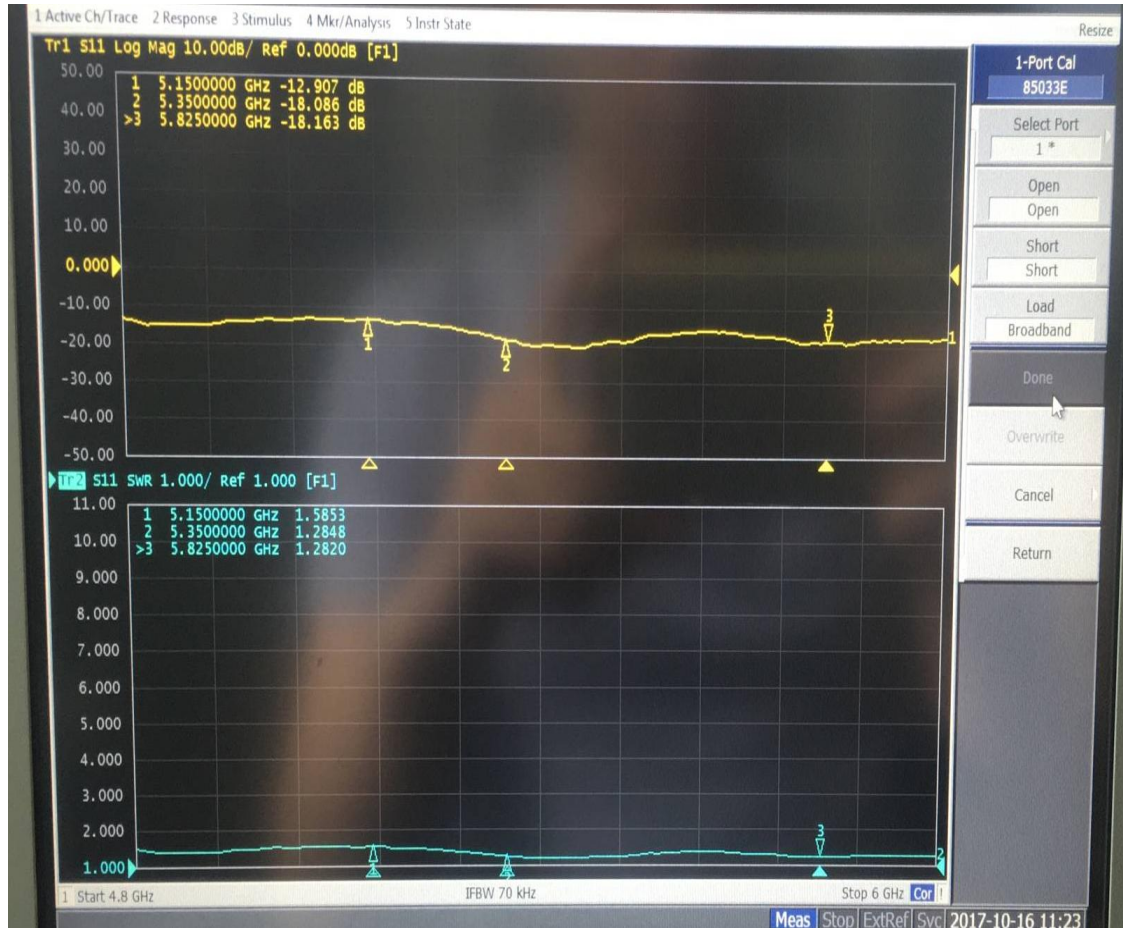
TITLE: 5G ANTENNA		 深圳市华德昌科技有限公司 ShenZhen HuaDeChang Technology Co., Ltd	
P/N:			
CUSTOMER: HDC-268			
DRAW NO.: H268-10001-B			
DIMENSIONS TOLERANCES UNLESS OTHERWISE NOTED		 APPROVED	
一般公差 TOLERANCE		SHEET: 1/1	CHECKED
		SCALE: 1:1	
		UNIT: mm	DRAWN: Wu LianPeng
		REV.A	

VNA test pattern

P/N: H268-10001-B

Specification: 5G 5dBi ANTENNA(Black)

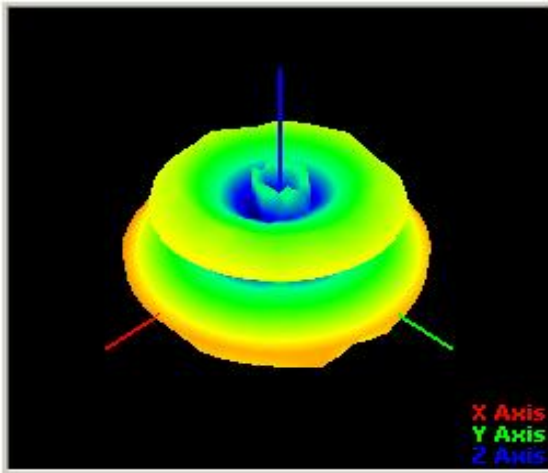
Test Item:Return Loss/VSWR



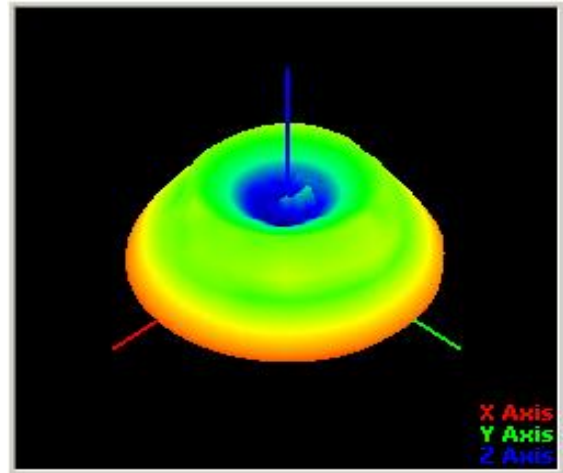
Laboratory test report

Test Item:Antenna Efficiency/PeakGain

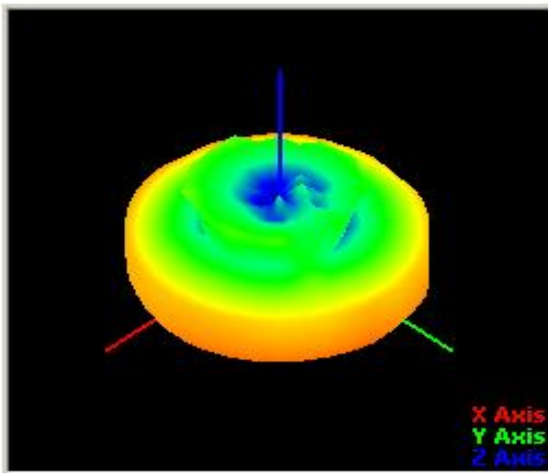
Freq. (MHz)	Gain (dBi)	Directivity (dBi)	Efficiency (%)
5150.0	5.31	5.81	89.2%
5250.0	5.93	6.07	96.8%
5350.0	5.90	6.19	93.5%
5450.0	5.89	6.22	92.6%
5550.0	5.80	5.97	96.2%
5650.0	5.88	6.32	90.5%
5750.0	6.04	6.48	90.3%
5850.0	5.50	6.00	89.0%



5150MHz



5350MHz



5850MHz

Parameter Specification

1、Technical Specifications

Frequency Range	5.15~5.825GHz
S. W. R	≤ 1.92
Gain	
Connection Type	SMA
Impedance	50 Ohm

2、Reliability Test

Item	Test Condition	Specification
Storage Environment	Temperature, humidity, and air pressure are tested in the absence of specified conditions: 1. emperature-30°C~+80°C 2. Relative humidity 45%-85% 3. pressure 86kpa-106kpa)	Normal electrical and mechanical properties
High and low temperature test	Between 70 and 40 degrees C for 5 cycles, and then under normal conditions 1-2H, check the appearance quality.	The dimensions shall meet the requirements and shall meet the requirements of the mechanical and electrical properties.
Resistance to constant damp heat test	Relative humidity 95 + 3%, test temperature: 40 degrees C, after continuing the role of 2H, after testing the electrical performance of the 5min within the test, the sample in the normal environment 1-2H, check the appearance quality	
vibration test	Frequency range 10-55HZ, displacement amplitude 0.35MM, acceleration amplitude 50.0M/S, frequency sweep cycle times 30 times	
Drop test	1m Altitude drop	Normal electrical and mechanical properties
Drawing force test	Confirm the strength of the product by using push pull tester: $\geq 10N$	
Ultraviolet aging test	Test temperature: 50°C time: 4hr	Allow yellow but with different color
Attenuation value	2.0(nominal) 1.0GHz 2.9(nominal) 2.0GHz 3.2(nominal) 2.4GHz 3.7(nominal) 3.0GHz 4.3(nominal) 4.0GHz 4.8(nominal) 5.0GHz 5.3(nominal) 6.0GHz	3.3dB/m (at20°C)

