
Shenzhen Keesun Technology Co.,Ltd

Product Approved sheet

Part P/N: KS085-10012 -A

specification: 2.4~2.5GHz/5.15~5.85GHz FPC Antenna

1.13 Gray Cable L=70mm+I-PEX 440-040609-B

Customer: Shen Zhen ShiRuiAn Technology Company Limited

Customer number: : 5080001

Quality department	Engineering department	Business department
MO LI FAN	FRED	Lily

Customer		
Verify	Check	Approve
Ella Wu	Lanna	Kevin Zhu
consequence:	Accept	NG
Opinion:		

Catalog

[illegible]

●Electrical Performance:

1. Frequency Range: 2.4GHz~2.5GHz /5.15~5.85 GHz
2. Impedance: 50 Ohms nominal
3. VSWR: ≤ 1.92
4. Gain: 1.88dBi
5. Admitted power radiation: 1W
6. Radiation of Radiation: Toroidal
7. Radiation: Omni
8. Polarization: Vertical
9. Connector Type: I-PEX

●Mechanical properties:

1. Cable: MI 1.13Black Cable, 50 Ohm
2. Operation temperature range: -20°C~ +70°C
3. Storage temperature range: -30°C~ +80°C
4. Color:black

Network analyzer test chart

Material number::KS085-10012 -A

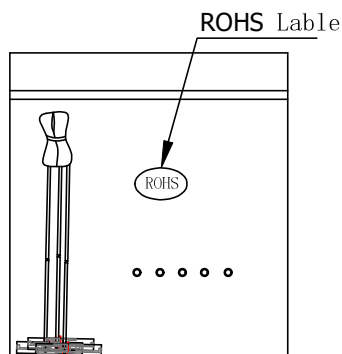
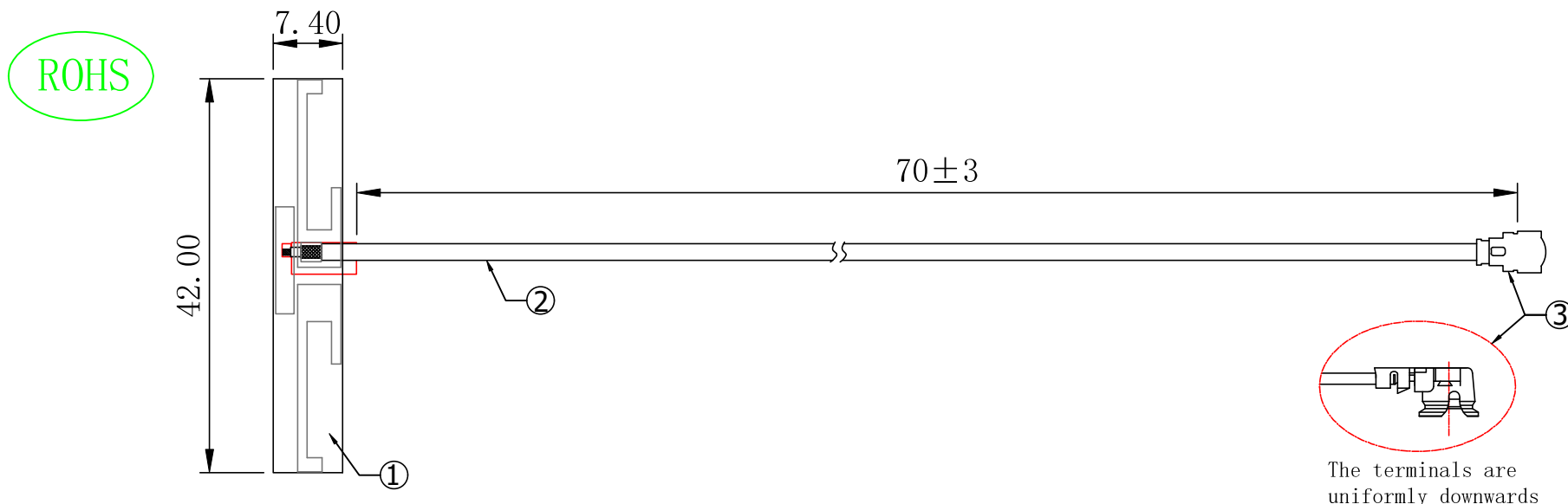
Name specifications:2.4~2.5GHz/5.15~5.85GHz 21.88dBi FPC

Antenna Test value:Return Loss/VSWR

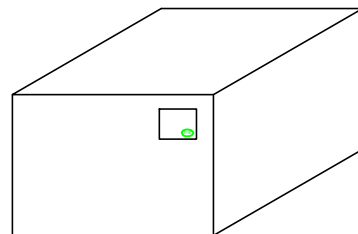


Product drwing

REV.	DESCRIPTION	DATE
X1	New Release	2020.7.14



50PCS/Bundle
Pack:200PCS/PE Bag



- 1.PCS/ROHS label shall be affixed to the outer carton label
- 2.1PCS/ carton label shall be affixed to the upper right corner of the carton side

SPECIFICATION:
FREQUENCY RANGE:2.4~2.5/5.15~5.85GHz
VSWR:1.92 MAX
IMPEDENCE:50Ω
Gain:2.0dBi

NO.	DESCRIPTION	Q'TY	REMARK
4		1	
3	CONN	IPEX FOR φ1.13mm Cable	1
2	CABLE	φ1.13mm CABLE (Gray)	1
1	FPC	(L42*W7.4mm)	1

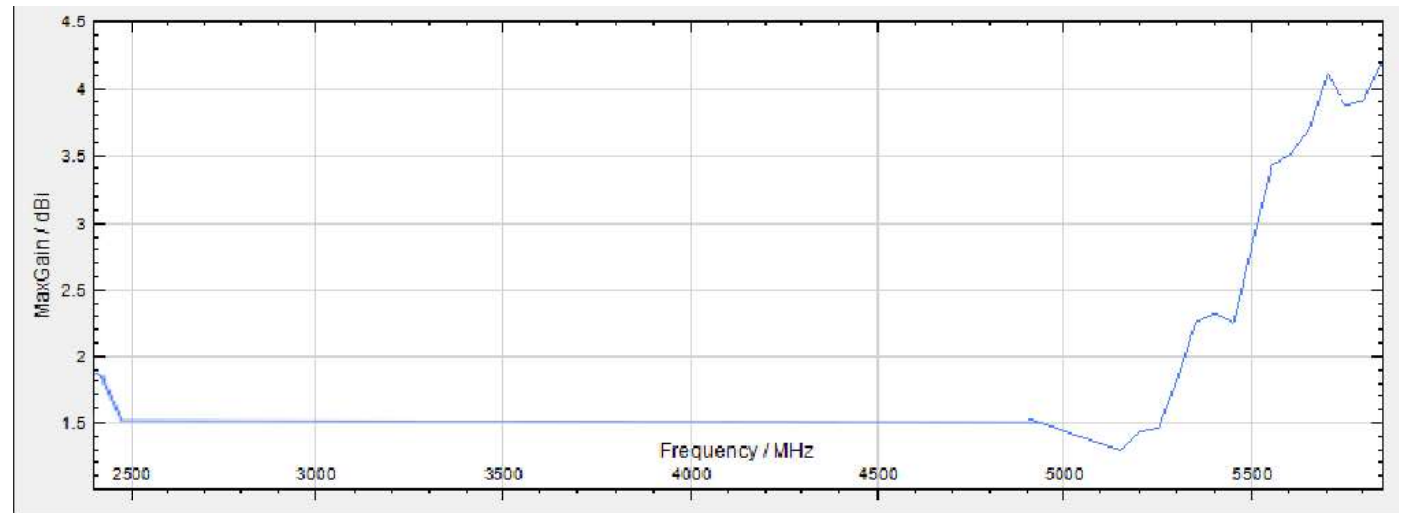
TITLE:		FPC内置天線+IPEX		SHENZHEN KEESUN TECHNOLOGY CO.,LTD					
P/N:		5080001							
CUSTOMER:		KS085							
DRAW NO.:		KS085-10012-A				APPROVED			
DIMENSIONS TOLERANCES UNLESS OTHERWISE NOTED						CHECKED			
TOLERANCE		.XXX	±0.05	XX.	±1.0	SHEET:1/1	SCALE:NONE	CHECKED	
		.XX	±0.1						
		.X	±0.2						
		X.	±0.5						
				UNIT: mm	REV.A	DRAWED	Fred		

Antenna Efficiency(2.4/5.8GHz)

Freq (MHz)	Effi (%)	Gain (dBi)
2400	32.84	1.88
2405	33.78	1.85
2410	34.42	1.87
2415	34.83	1.86
2420	34.87	1.84
2425	34.26	1.8
2430	33.58	1.72
2435	33.46	1.67
2440	34.23	1.76
2445	34.31	1.79
2450	33.34	1.59
2455	35.17	1.81
2460	35.45	1.88
2465	34.9	1.76
2470	34.15	1.73
2475	34.13	1.66
2480	33.77	1.62
2485	34.12	1.59
2490	35.14	1.69
2495	33.98	1.53
2500	33.13	1.52

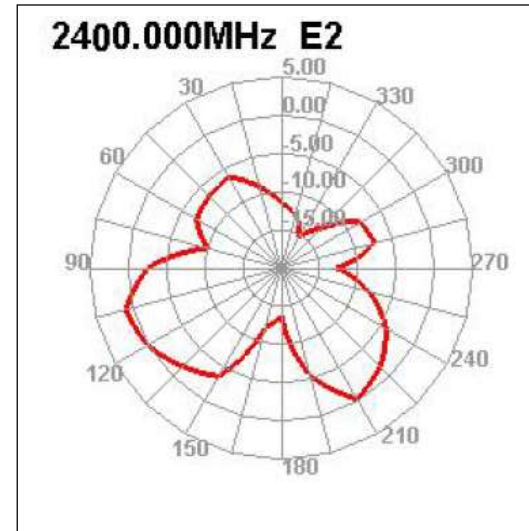
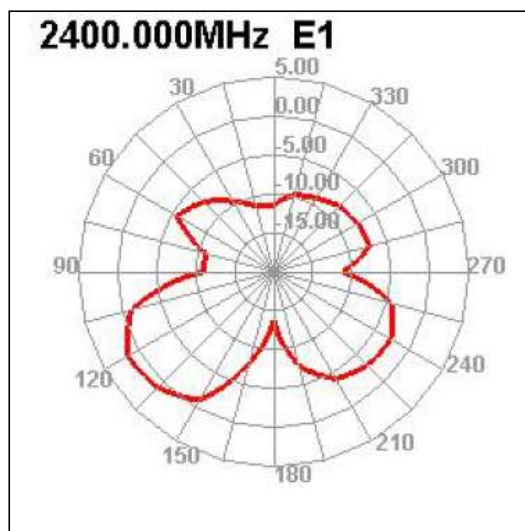
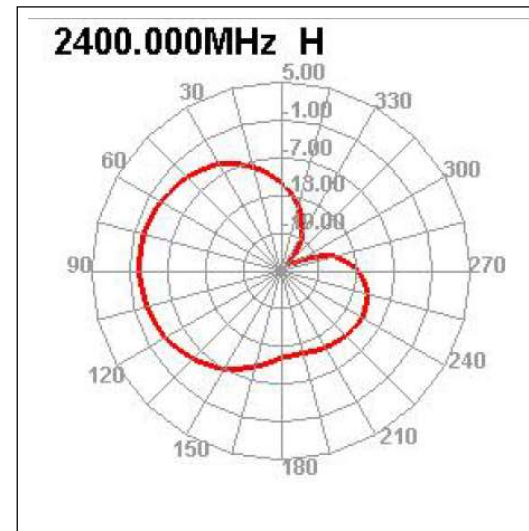
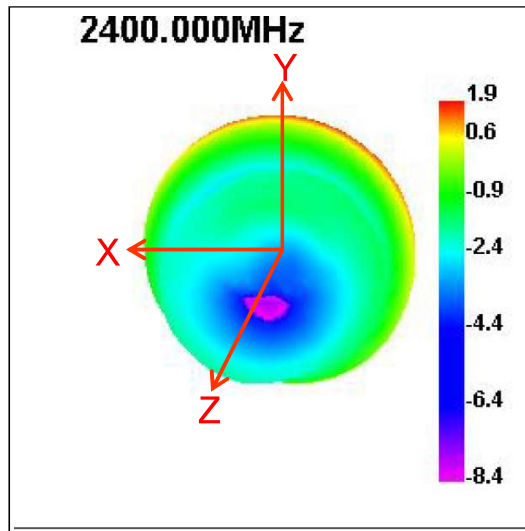
Antenna PeakGain(2.4/5.8GHz)

Frequency/MH	MaxGain/dBi
2400	1.88
2410	1.80
2420	1.78
2430	1.7
2440	1.75
2450	1.72
2460	1.70
2470	1.69
2480	1.66
2490	1.63
2500	1.50
5150	1.3
5200	1.44
5250	1.47
5300	1.83
5350	2.27
5400	2.33
5450	2.26
5500	2.85
5550	3.43
5600	3.51
5650	3.7
5700	2.12
5750	3.88
5800	3.92
5850	2.22



Antenna Gain

Radiation patterns—2D (2.4)



Antenna standard parameters

一、Technical specifications

Operating frequency range	2.4GHz~2.5GHz /5.15~5.85 GHz
S. W. R	≤ 1.92
Antenna gain	1.88dBi
Switching mode	I-pex
Impedance	50 Ohm

二、Reliability test

Project	Test condition	Specifications
Storage environment	Temperature, humidity, and air pressure are tested in the absence of specified conditions: 1 temperature is -30 degrees C to +80 2 relative humidity is 45%-85% 3 air pressure is 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%, the test temperature: 40 degrees C, after continuing the 2H effect, the test sample after taking out the electrical performance of 5min, test product 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.
Vibration test	Frequency range 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M/S, sweep frequency cycle times: 30 times	Normal electrical and mechanical properties
Drop test	1m high altitude drop	Normal electrical and mechanical properties
Drawing force test	To test the bearing strength with push pull test instrument: 10N	Normal electrical and mechanical properties
Voltage resistance	1 insulation spark voltage 1.5KV 2 sheath spark voltage 1.5KV 3 insulation resistance to sheath voltage 0.5KV	Normal electrical and mechanical properties
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)