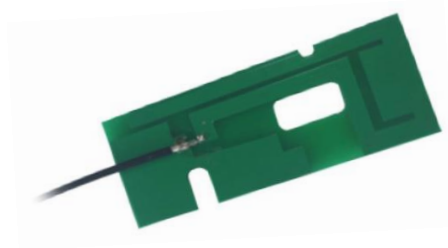




**SUNNYWAY**

# **SWP003**

**PN: SW19003IG97**



**Sunnyway Technology**

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## 1. Electrical Specifications

Standards	4G/3G/2G
Frequency range	824~960,1710~2690mhz
Peak Gain(dBi)	-1~2dBi
Average Gain(dBi)	-2~-5dB
Polarization mode	Linear
VSWR	~2-7
Return Loss	~-4dB
Efficiency (%)	30%
Radiation pattern	Omni-Directional
Output impedance ( $\Omega$ )	50
Max. Input Power(W)	25

## 2. Mechanical and Environmental Specification

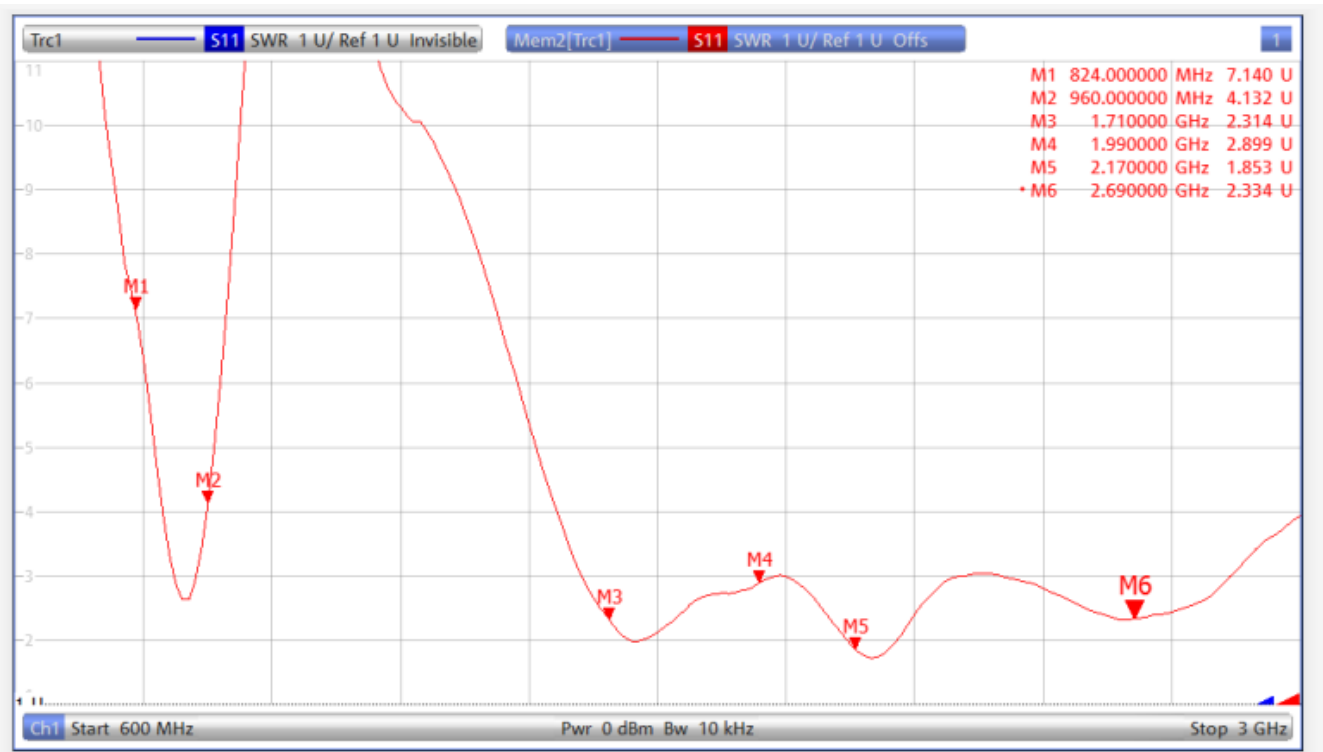
Mounting Type	Adhesive
Adhesive Type	3M9448A
Connector Type	U.FL Standard
Antenna size(mm)	43.36mm (L) x 17.0mm (W) x 1.0mm (H)
Material	PCB



Cable length(mm)	101mm
Operating Temperature (°C)	- 40 °C ~ + 85 °C
Storage Temperature(°C)	- 40 °C ~ + 85 °C

### 3. Antenna parameters

FRE (MHz)	824	960	1710	1990	2170	2690
VSWR	7.14	4.13	2.31	2.89	1.85	2.33
Return Loss	-2.45	-4.28	-8.04	-6.25	-10.4	-7.95
Eff (%)	25.0	22.1	46.1	34.6	47.2	52.9
AVE Gain(dBi)	-6.02	-6.55	-3.37	-4.61	-3.26	-2.77

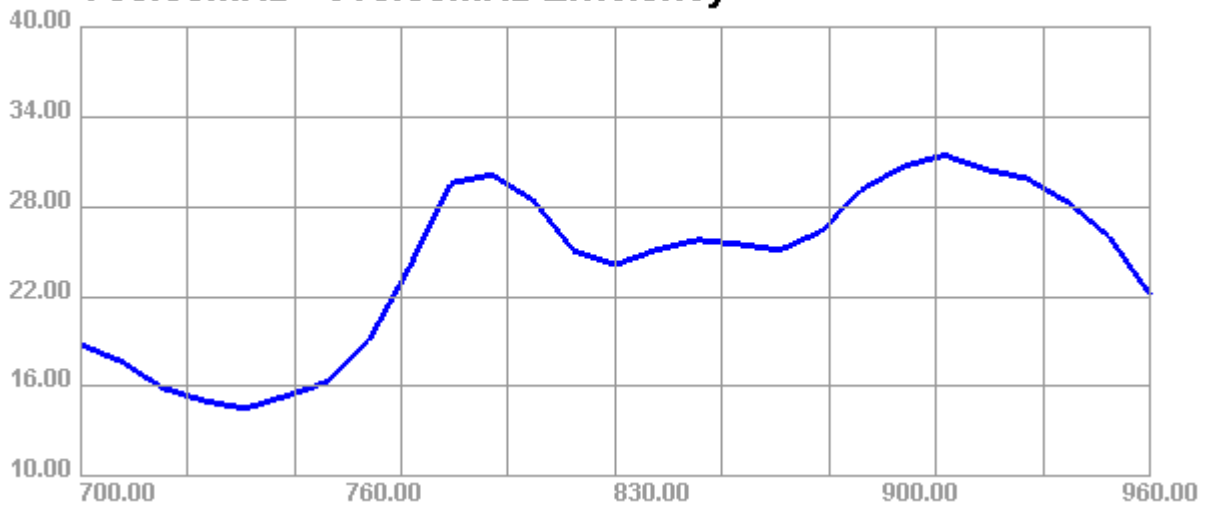


## VSWR

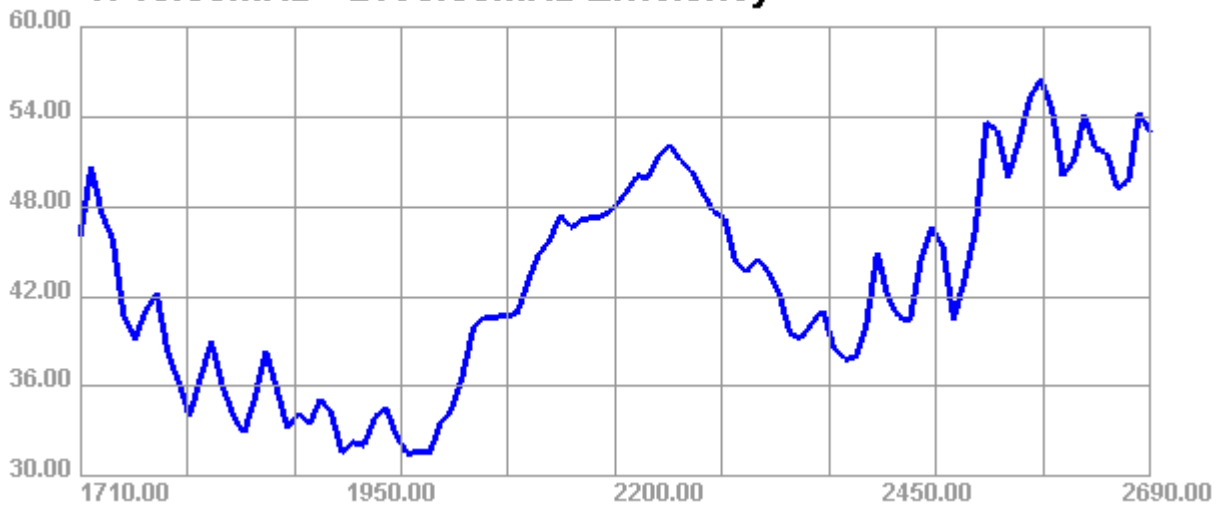


## Return Loss

### 700.00MHz - 960.00MHz Efficiency

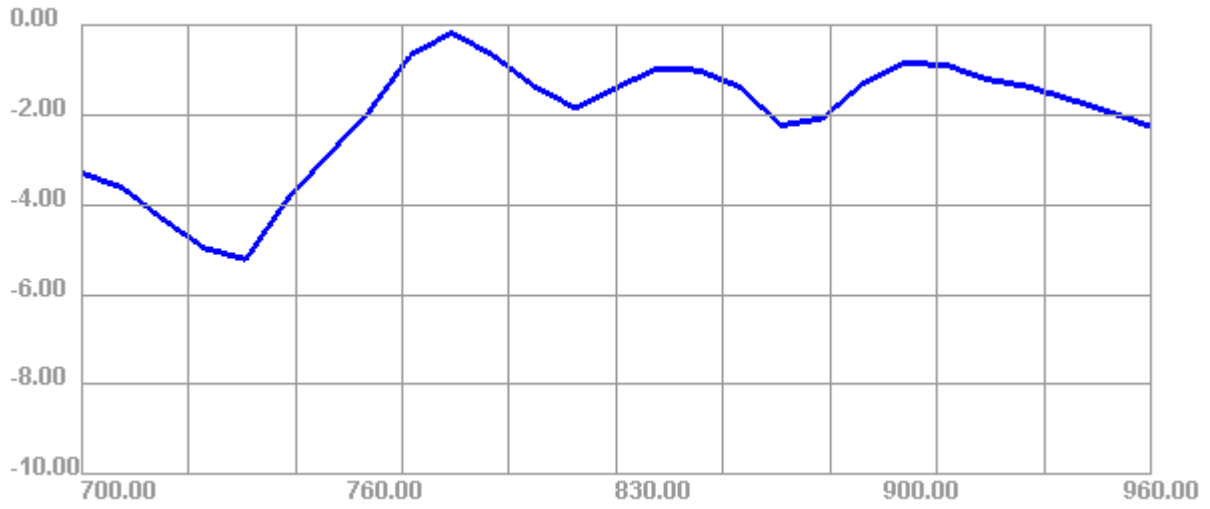


### 1710.00MHz - 2690.00MHz Efficiency

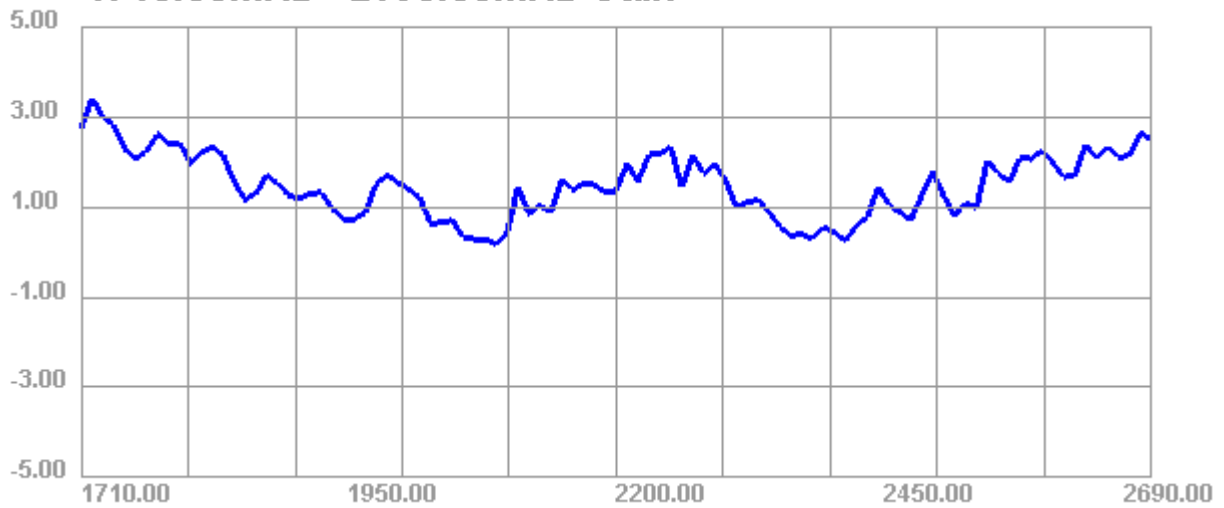




### 700.00MHz - 960.00MHz Gain

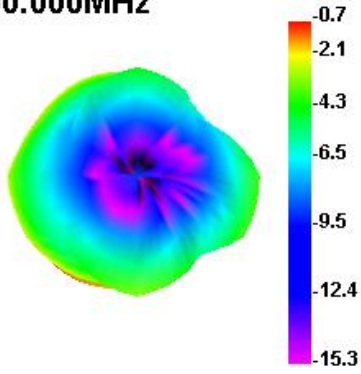


### 1710.00MHz - 2690.00MHz Gain

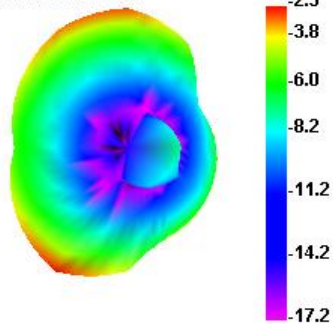


# Directional pattern

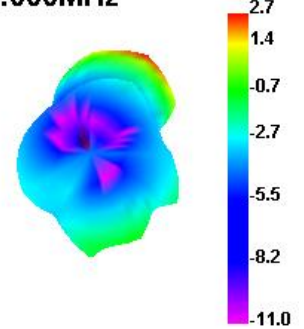
800.000MHz



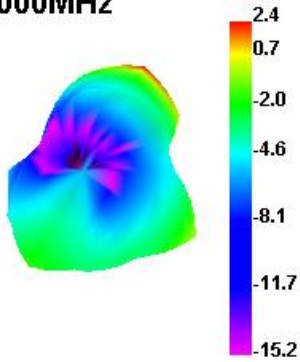
960.000MHz



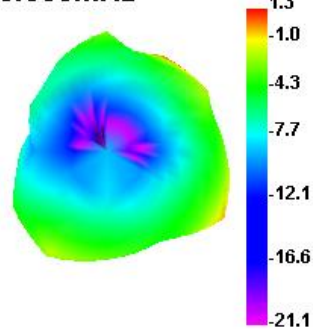
1710.000MHz



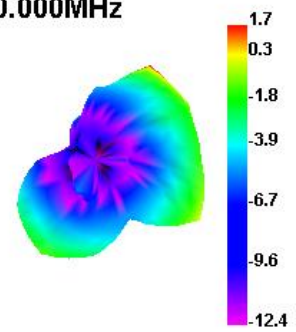
1800.000MHz



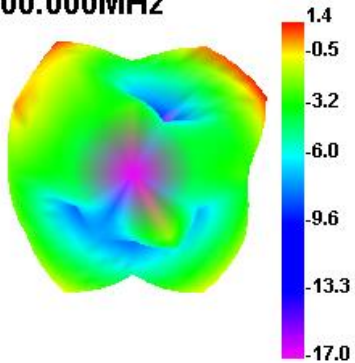
1900.000MHz



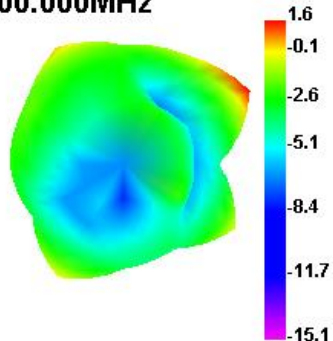
1990.000MHz



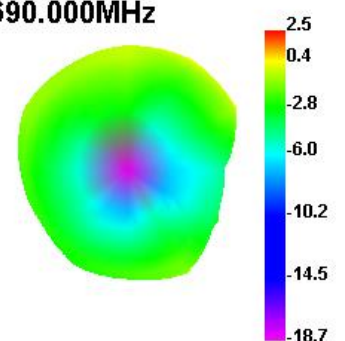
2200.000MHz



2300.000MHz



2690.000MHz





# 4. Antenna Drawings

E	D	C	B	A																																																																											
<p>Top view dimensions: 101.00±2.00, 17.00±0.25, 43.36±0.25, 1.00±0.15, 1.10±0.15. Hole diameter: <math>\varnothing 1.13</math>. Callouts: 1, 2, 3.</p> <p>Side view dimensions: 1.00±0.15, 1.10±0.15. Callout: 3.</p>																																																																															
<p><b>Technology requirement:</b></p> <p>1: With "*" as the key detection size;</p> <p>2: Excipients should not be biased;</p> <p>3: Appearance requirements are based on the antenna inspection standard. When the coaxial wire is soldered to the PCB, there is no unwelding phenomenon, and the terminal direction is not solderable.</p> <p>4: Unfilled tolerances refer to the general tolerance table;</p>																																																																															
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