

SWF009

PN: SW20061IB77

Key features:

- Frequency bands from 698~960MHz,1710~2690MHz
- Impedance 50 Ohm
- Antenna for LTE applications including MIMO systems
- Small size, High gain
- Size 52 x 14 x 0.12mm

Typical applications:

- LTE ,NB-IoT, Cat M1
- Portable Devices
- Remote monitoring
- Network Devices
- Others



1. Introduction	3
2. Electrical Specification	4
3. Mechanical and Environmental Specification	4
4. Antenna parameters	5
5. Antenna Drawing	7

Sunnyway RF reserves all rights to this document and the information contained herein. Reproduction, use or disclosure to third parties without express permission is strictly prohibited

1. Introduction



The Sunnyway RF SWF009 flexible broadband antenna is designed to cover all operating frequencies in the 698~960MHz, 1710~2690MHz spectrum, covering all cellular, excellent efficiency in all frequency bands, independent of ground, with easy-to-install.

The size of SWF009 antenna is 52.0*14.0*0.12mm, ultra-thin and wide-band, with high efficiency in the whole frequency band. It is assembled through a simple "peel and stick" process, securely attached to non-metallic surfaces with 3M adhesive. It enables designers to use only one antenna that cover LTE frequencies.

Cables and connectors can be customized. as with all such antennas, the antenna should be installed with care. at least 10mm from metal parts or surfaces, ideally 20mm for best radiation efficiency.

Typical applications:

- LTE ,NB-IoT, Cat M1
- Portable Devices
- Remote monitoring
- Network Devices
- Others

2. Electrical Specification

Standards	4G/3G/2G/NB-IoT/CAT M1	
Frequency range (MHz)	698~960	1710~2690
Peak Gain (dBi)	-1.5~1.0	0~5.0
Average Gain (dB)	-7.0~-3.8	-5.0~-0.7
VSWR	< 6.0	< 4.0
Return Loss	< -3.0	< -4.0
Efficiency (%)	20~42%	31~85%
Polarization mode	Linear	
Radiation pattern	Omni-Directional	
Output impedance (Ω)	50	
Max. Input Power(W)	5	

3. Mechanical and Environmental Specification

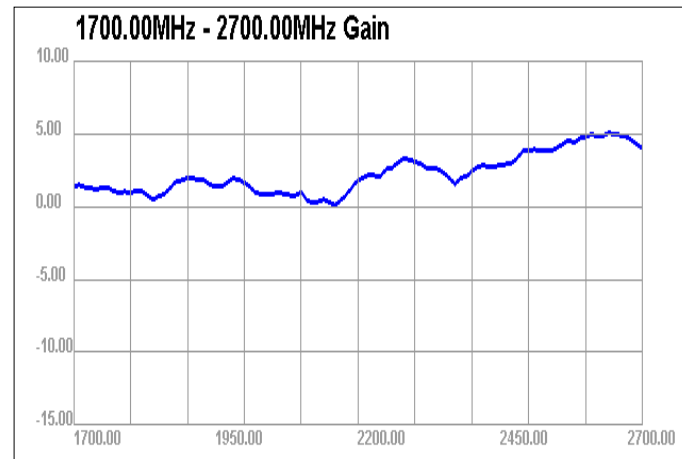
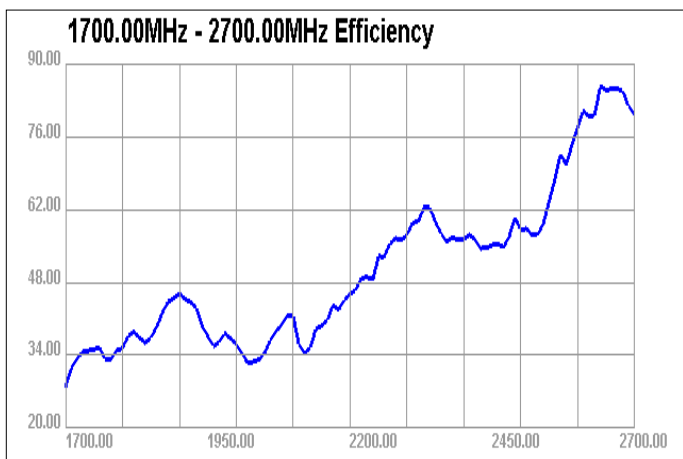
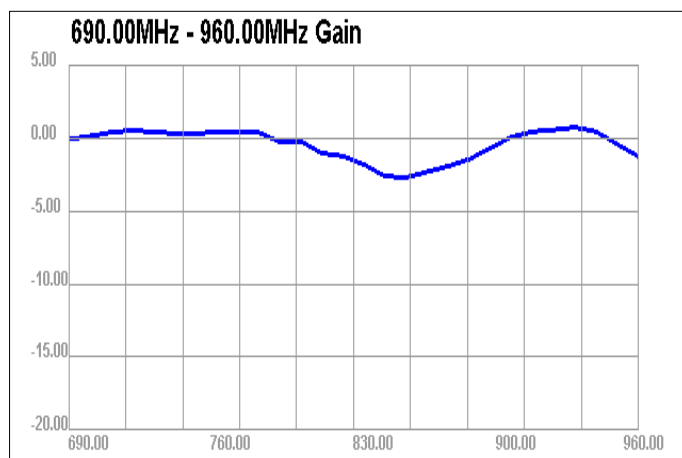
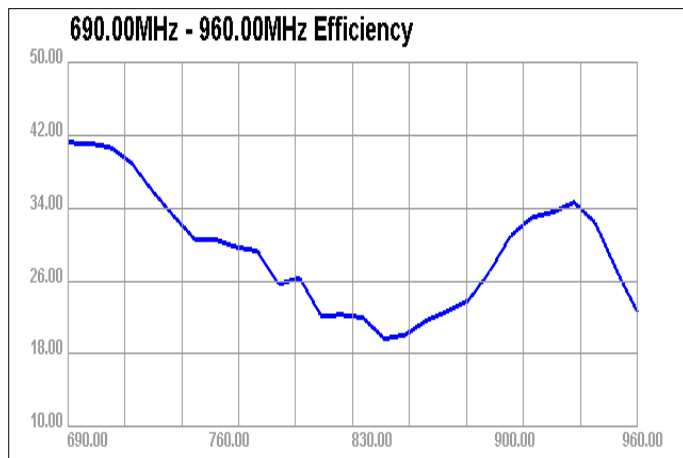
Mounting Type	Adhesive
Adhesive Type	3M467
Connector Type	IPEX MHF1
Antenna size(mm)	52.0 (L) x14.0 (W) x0.12 (H)
Material	FPC
Cable length(mm)	70mm
Operating Temperature (°C)	- 40 °C ~ + 85 °C
Storage Temperature(°C)	- 40 °C ~ + 85 °C

4. Antenna parameters

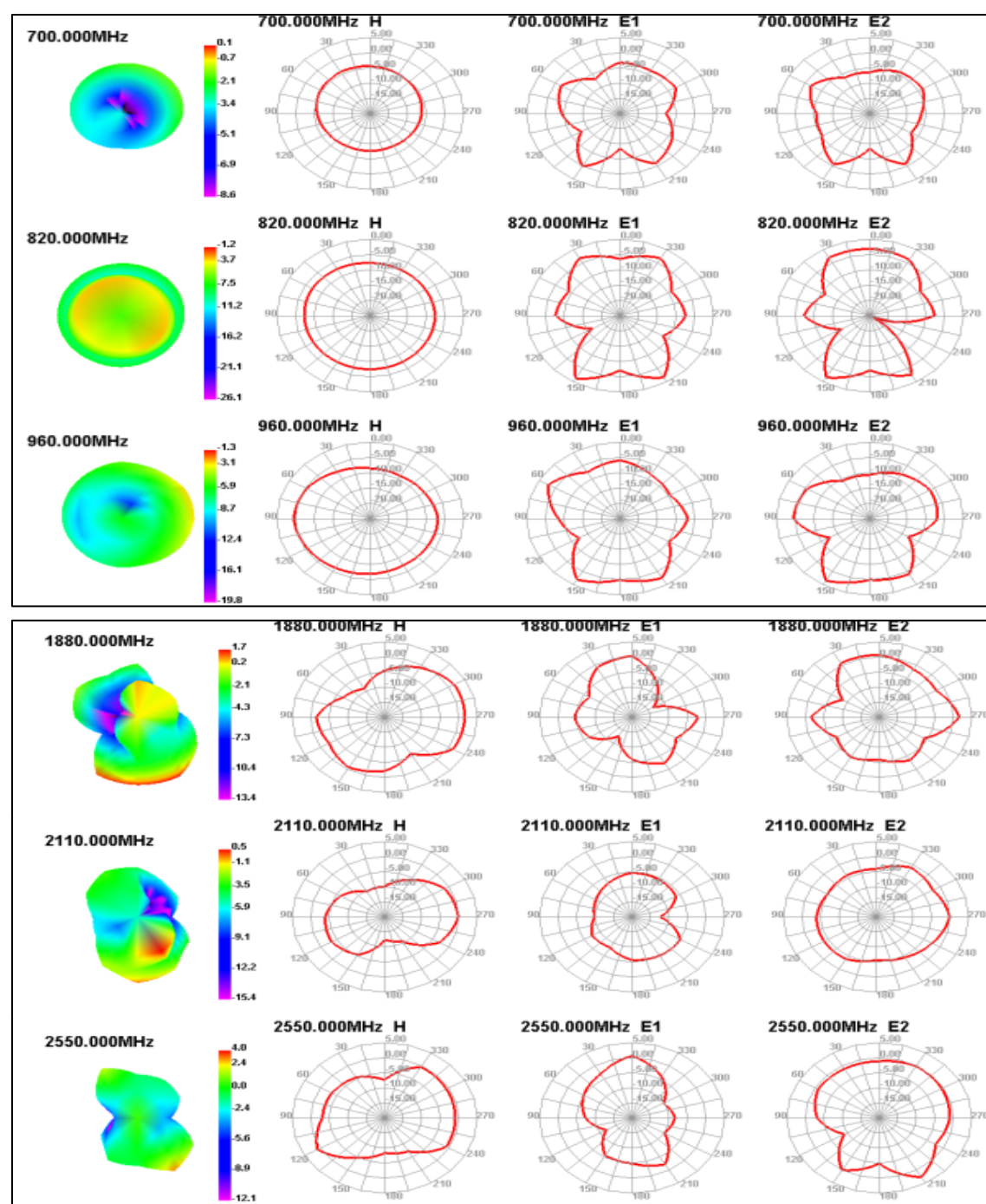
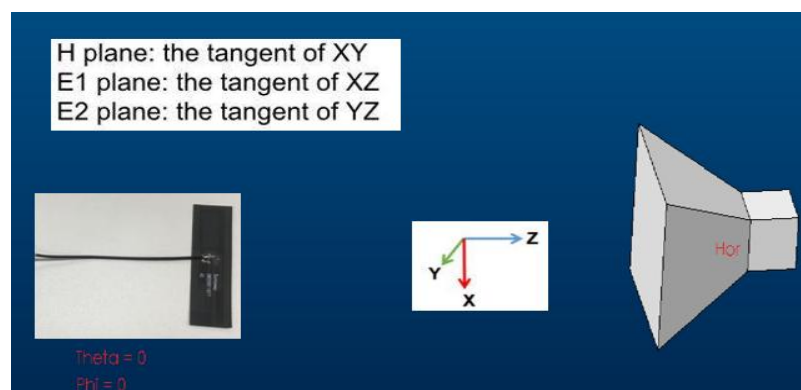
4.1 VSWR and Return Loss



4.2 Efficiency and Gain



4.3 Directional pattern



5. Antenna Drawing(Unit:mm)

