SWF013

PN: SW21017IB77



Key features:

- Antenna for 824~960MHz,1710~2170MHz
- Foldable for tight spaces
- Impedance 50 Ohm

Typical applications:

- Portable Devices
- Remote monitoring
- Network Devices
- Others

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1. Introduction



The Sunnyway SWF013 flexible broadband antenna is designed to cover all operating frequencies in the 824~960MHz, 1710~2170MHz spectrum,covering all cellular,excellent efficiency in all frequency bands, independent of ground, with easy-to-install.

The size of SWF013antenna is 40.4*15.4*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 3G/2G 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:

- Portable Devices
- Remote monitoring
- Network Devices
- Others

2. Electrical Specification

Standards	3G&2G	
Frequency range (MHz)	824~960	1710~2170
Peak Gain (dBi)	-3.7~-2.1	2.2~6.5
Average Gain (dB)	-6.8~-5.7	-4.5~-3.0
VSWR	< 4.5	< 2.0
Return Loss	< -4.0	< -10.0
Efficiency (%)	20~27%	35~50%
Polarization mode	Linear	
Radiation pattern	Omni-Directional	
Output impedance (Ω)	50	
Max. Input Power(W)	5	

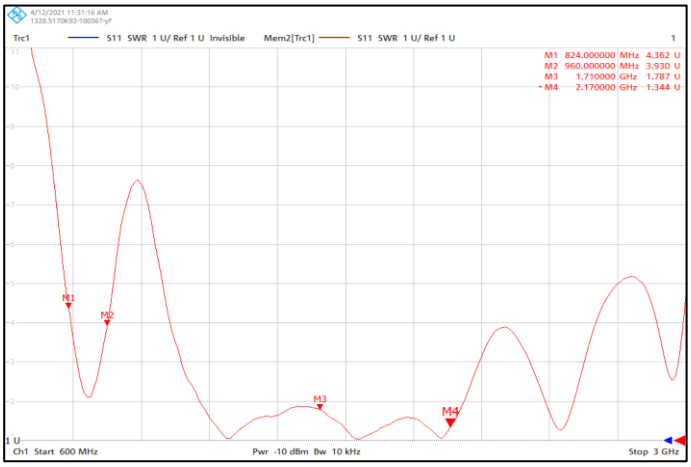
Note: Tested with 100mm cable length

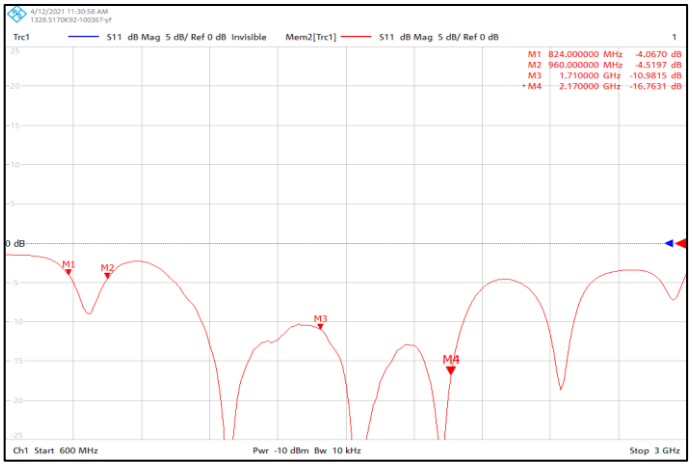
3. Mechanical and Environmental Specifications

Mounting Type	Adhesive
Adhesive Type	3M9471LSE
Connector Type	IPEX MHF1
Antenna size(mm)	40.4(L) x 15.4(W) x 0.12(H)
Material	FPC
Cable length(mm)	100
Operating Temperature (˚C)	- 40 ˚C ~ +85 ˚C
Storage Temperature(˚C)	- 40 ˚C ~ +85 ˚C

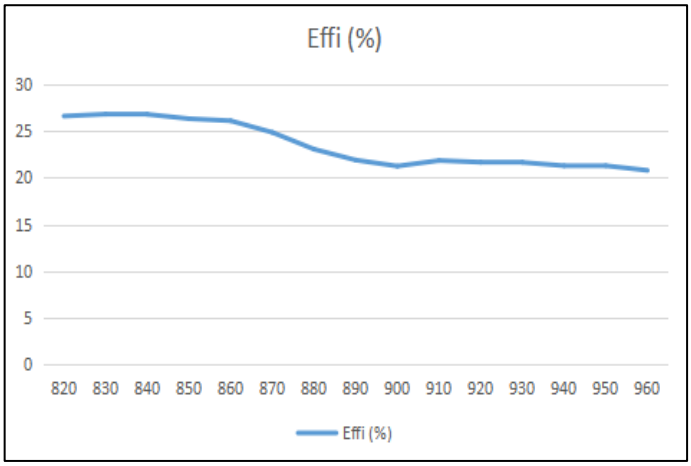
4. Antenna Parameters

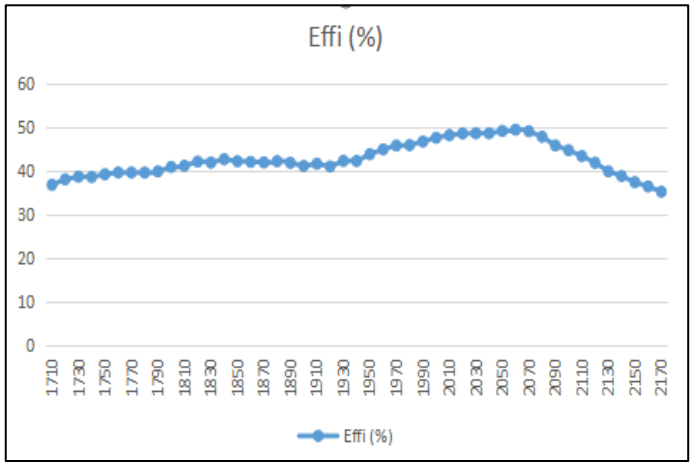
4.1 VSWR and Return Loss

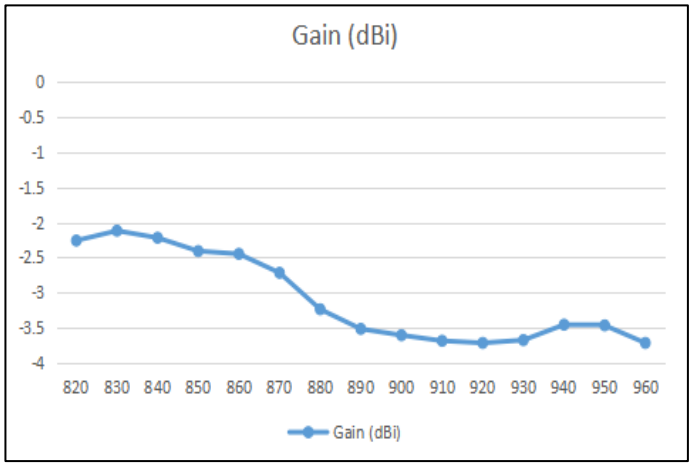


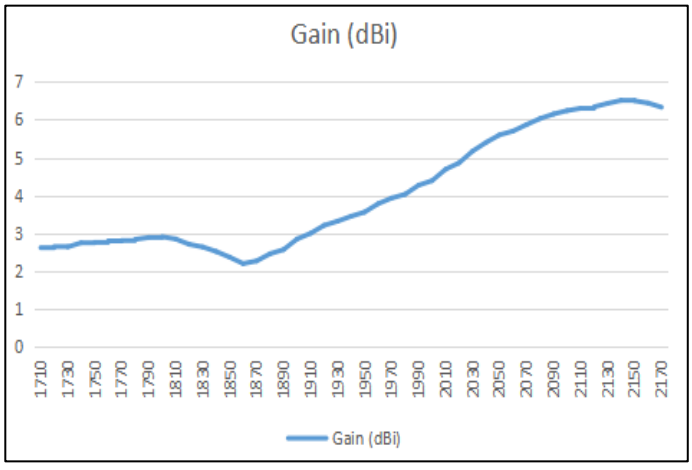


4.2 Efficiency and Gain

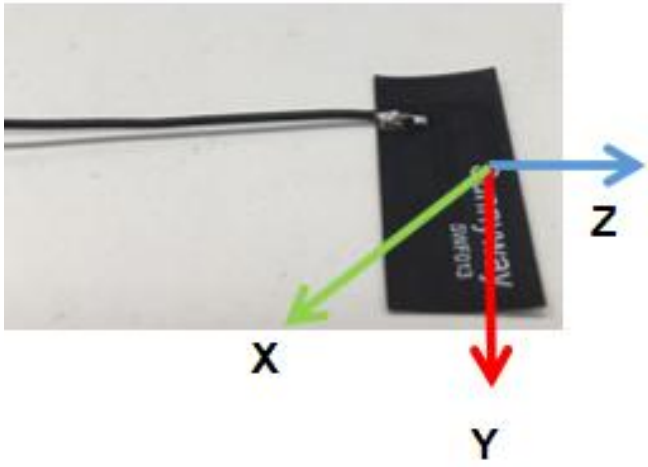


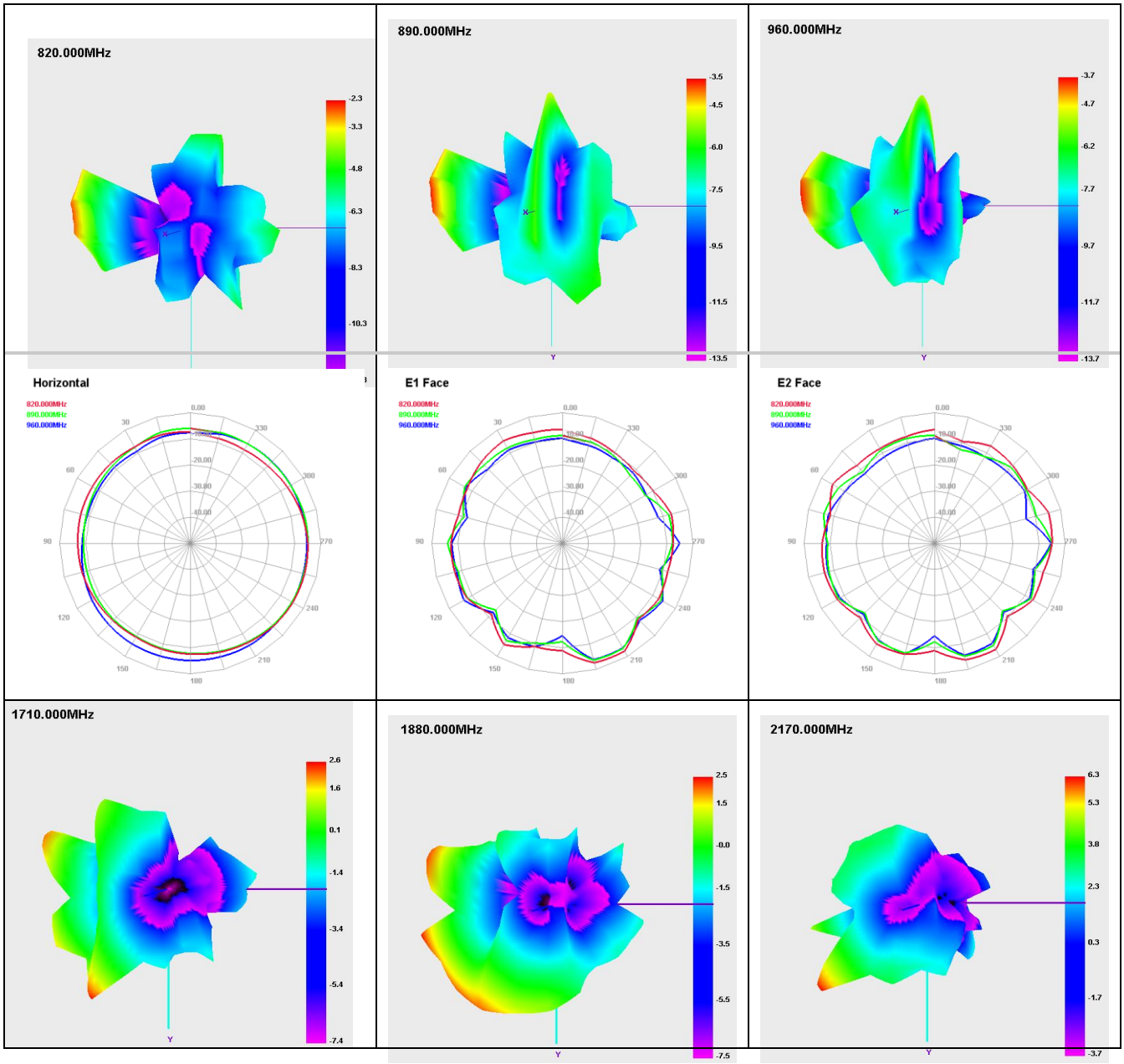


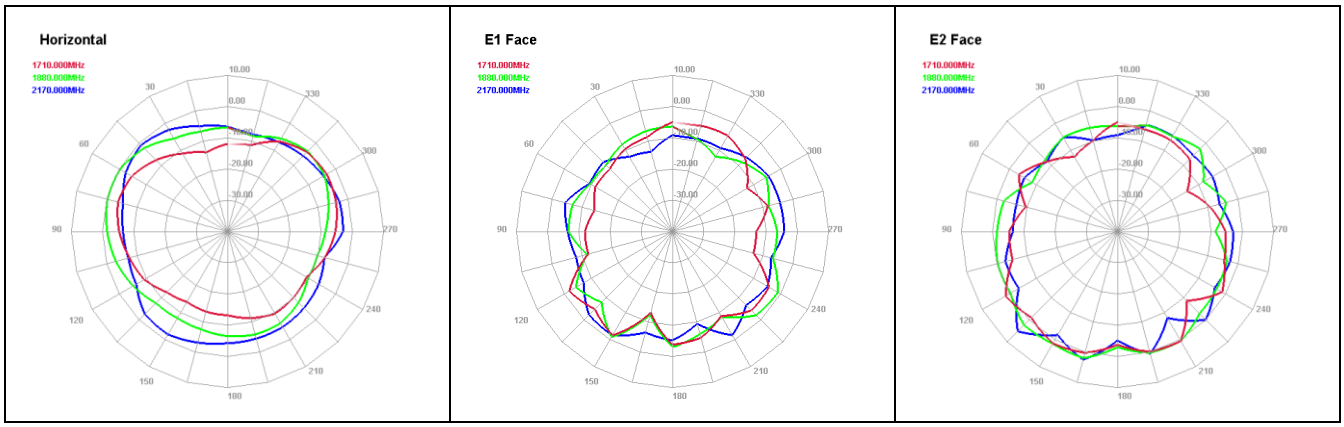




4.3 Directional Pattern

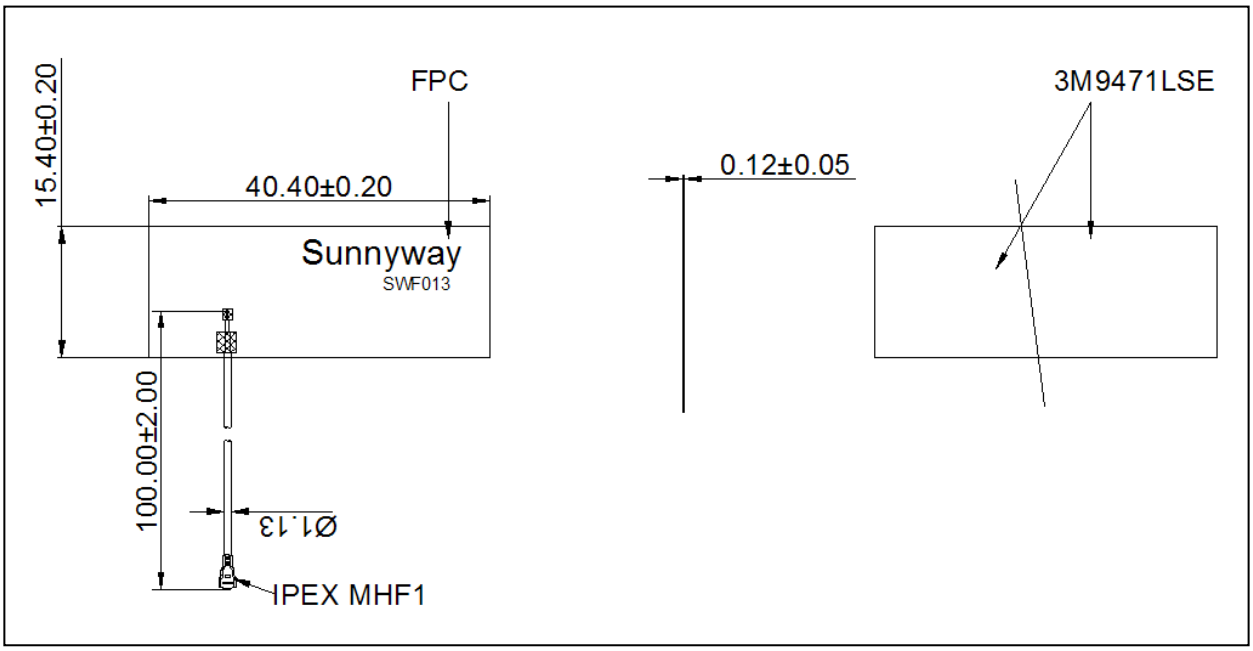






5. Antenna Drawing

Unit: mm



Changelog for the datasheet			
Revision	Date	Author:	Notes:
-	2019-04-17	Kevin LV	Initial Datasheet Release
V0	2025-05-29	Kevin LV	Update text formatting, titles, fonts, etc