

# ANPPROVANLSHEET

**RFECA Series – RoHS Compliance**

**On-board Antenna**

**Halogens Free Product**

**2.4 GHz ISM Band Working Frequency**

**P/N: MS-ANT-F-S1**

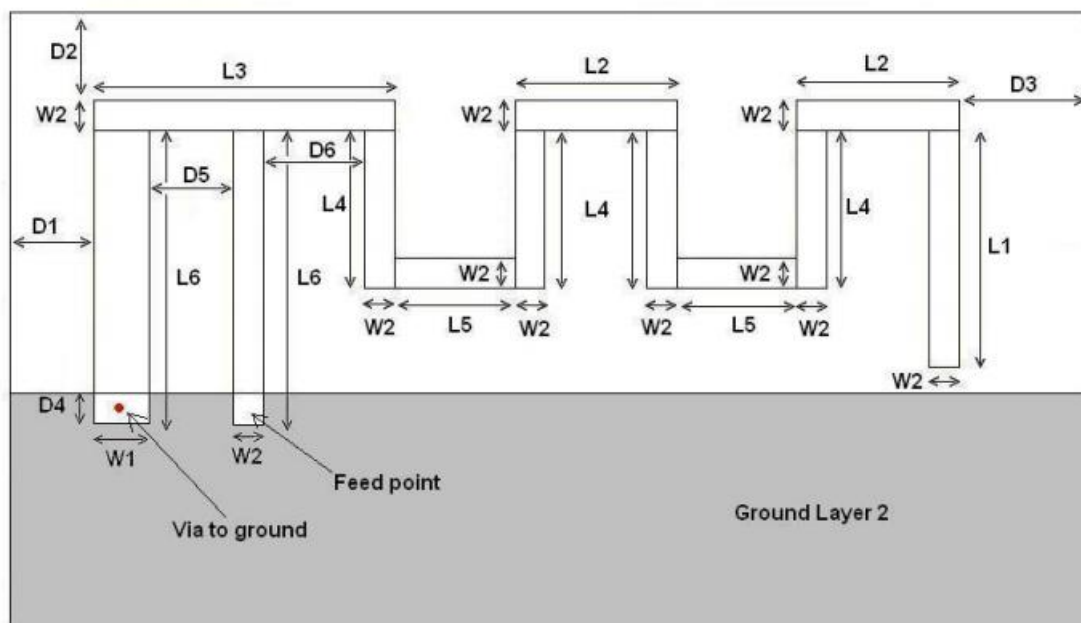
\*Contents in this sheet are subject to change without prior notice.

**FEATURES**

1. a small dimension of 11.4 X 5.4 mm<sup>2</sup>
3. High stability in Temperature / Humidity Change.
4. Superb performance to place on the middle of PCB edge and excellent peak/ average gain observed by field test application.

**APPLICATIONS**

1. ISM Band 2.4GHz applications.
2. Bluetooth..

**CONSTRUCTION****DIMENSIONS**

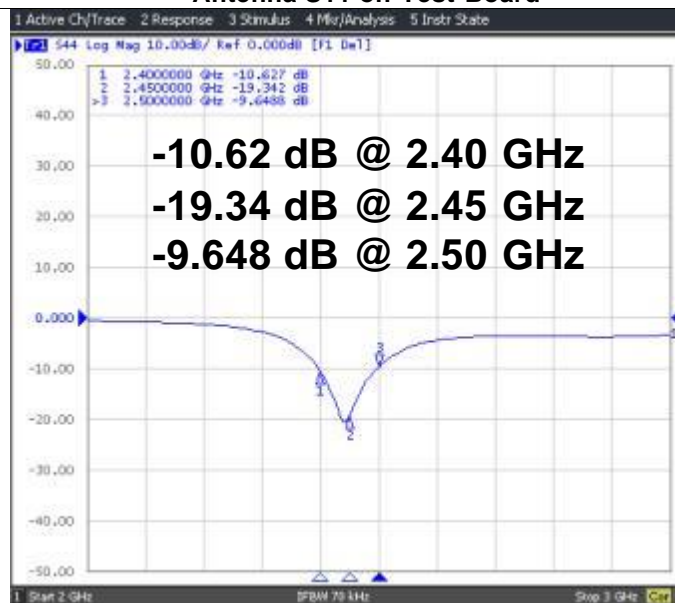
L1	3.94 mm
L2	2.70 mm
L3	5.00 mm
L4	2.64 mm
L5	2.00 mm
L6	4.90 mm
W1	0.90 mm
W2	0.50 mm
D1	0.50 mm
D2	0.30 mm
D3	0.30 mm
D4	0.50 mm
D5	1.40mm
D6	1.70 mm

## TYPE 1 ELECTRONIC CHARACTERISTICS

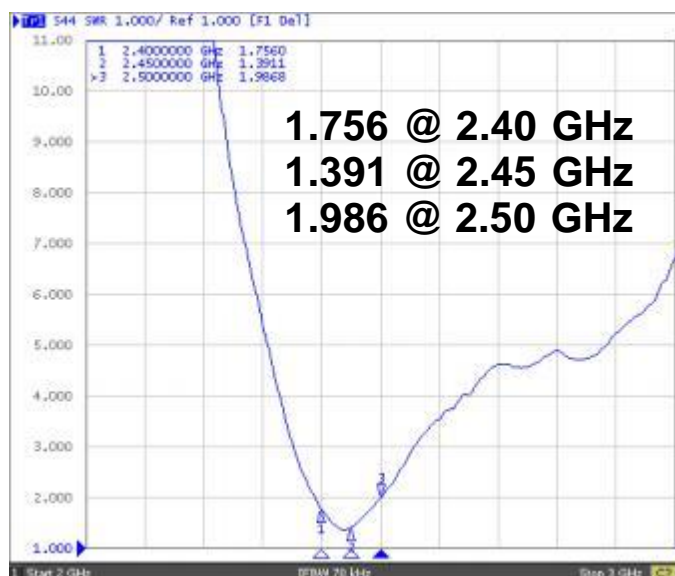
Item	Specification
Working Frequency Range	2.4GHz~2.4835GHz (Note-1)
Gain	2 dBi (Typical)
VSWR	2.1 max.
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Impedance	50Ω

\*Note 1. Central Frequency should be defined after customers' application approval.

Antenna S11 on Test Board



Antenna VSWR on Test Board



**RADIATION PATTERN**

Radiation Pattern and Gain were dependent on measurement board design. The specification of MS-ANT-F-S1 antenna was measured based on the PCB size and installation position

