



88339 EAN 4043619883394

# SMA WLAN Antenna with flexible joint

#### Description

This Wireless Lan antenna can be connected to your WLAN device with SMA connector in order to receive a signal.

## **Specification**

- SMA screw connection
- With flexible joint
- 2dBi Gain

#### Package content

• WLAN antenna

#### Package

• Delock blister package

#### **Environmental Characteristics**

Operation:  $-20 \sim +65 \degree C$ Storage:  $-30 \sim +75\degree C$ 





# **Technical drawing**



#### **1. Test Condition**

 $T = 5 \sim 35 \,^{\circ}C$ ; Humidity = 45 ~ 85%; Atmosphere = 860 ~ 1060 hpa

ITEM	TEST CONDITION	SPECIFICATION			
Mechanical Performance					
Vibration	Ratio: 10-50-10 Hz/minute Vibration amplitude:1.5 mm To vibrate 2 hrs on X,Y,Z direction(Totally 6 hrs)	No abnormal of appearance, construction, mechanical.			
Tensile of Coaxi- al minute	To load 1Kgf weight within 1	No fall of Coaxial cable. Remarks: This test only for pigtail type.			
Electrical Properties					
VSWR	To detect on free space.	2.0 at 2.4~2.5GHz			
Return Loss	(VSWR & Return Loss testing to read next figure for ref.)	-10 dB at 2.4~2.5GHz			
Impedance		50Ω nominal			
Directional		Omni			
Max GAIN		2.0dbi at 2.4GHz			



Environmental Performance					
Temperature Life	To put antenna at 60±2°C within 96 hrs then take it out to put at normal environment within 1 hour later to detect.	No abnormal of appearance, construction, mechanical.			
Cold Life	To keep in -10±2°C within 96hrs and take out to put at normal environment within 1 hour later to detect.				
Humidity Stable	To keep in +40±2°C , damp=90~95% within 96 hrs and take it out to put at normal environment within 1 hour later to detect.				
Thermal Shock	To put antenna at -20°C & +60°C and each degree for 1 hour as a cycle, totally need to repeat 10 cycles then put at normal environment within 1 hour later to detect.				





# 2. Test result:

#### 1. Return Loss

Antenna	Center Freg.	BW	Return Loss		
	MHz	MHz	2.4 GHz	2.45 GHz	2.5 GHz
	2450	100	-19.419	-20.433	-14.970





## 2. VSWR

Antenna	Center Freg.	BW	VSWR		
	MHz	MHz	2.4 GHz	2.45 GHz	2.5 GHz
	2450	100	1.239	1.210	1.434





# 3. Radiation Pattern: E-Plane X-Y Plane

2400-2500 MHz H-Plane 2400 MHz -49.5 dBm -0.5 dBd (1.6 dBi) -2.7 dBd



#### **X-Y Plane**

2400-2500 MHz H-Plane 2450 MHz -50.0 dBm -0.6 dBd (1.6 dBi) -2.3 dBd





## X-Y Plane

2400-2500 MHz H-Plane 2500 MHz -50.2 dBm -1.6 dBd (0.5 dBi) -3.0 dBd



#### 4. Radiation Pattern: H-Plane E-Plane

2400-2500 MHz E-Plane 2400 MHz -49.5 dBm -0.1 dBd (2.0 dBi) -4.2 dBd



# We move the world

## E-Plane

2400-2500 MHz E-Plane 2450 MHz -50.0 dBm -0.4 dBd (1.8 dBi) -4.5 dBd



#### **E-Plane**

2400-2500 MHz E-Plane 2500 MHz -50.2 dBm -1.2 dBd (0.9 dBi) -5.5 dBd

