

**Description: 2400-2500/4900-5925MHz Swivel  
WiFi Antenna with coax feed**

**Series: STICK ANTENNA**

**PART NUMBER: W1039B030**



Antenna



Mounting grommet,  
supplied with Antenna

### Features:

- Frequency:
  - 2400-2500/4900-5925MHz
- VSWR: 2:1
- Gain: 1 dBi / 2 dBi
- Efficiency: 60% / 50 %
- Length 88 mm (90 deg bent)
- 76 mm coax with U.FL
- RoHS Compliant

### Applications:

- 2.4GHz and 5GHz radios
- Indoor use
- WiFi, Bluetooth, Zigbee
- Routers, Gateways, Data terminals
- IoT
- Automation, security

All dimensions are in mm / inches

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In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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### ELECTRICAL SPECIFICATIONS

Antenna Type	Dipole Antenna
Frequency	2400-2500MHz/4900-5925MHz
Nominal Impedance	50 $\Omega$
VSWR	2:1(MAX)
Radiation Pattern	Omni
Gain	>1dBi / >2dBi
Efficiency	>60% / > 50%
Polarization	Vertical
Power Withstanding	2 W

### MECHANICAL SPECIFICATIONS

Overall Length	181.3 mm
Weight	7.46 g
Antenna Color / Material	TPEE63D / Black
Connector type	Similar with U.FL
Cable type	$\Phi$ 1.13mm coaxial cable
Cable length	76 mm

### ENVIRONMENTAL SPECIFICATIONS

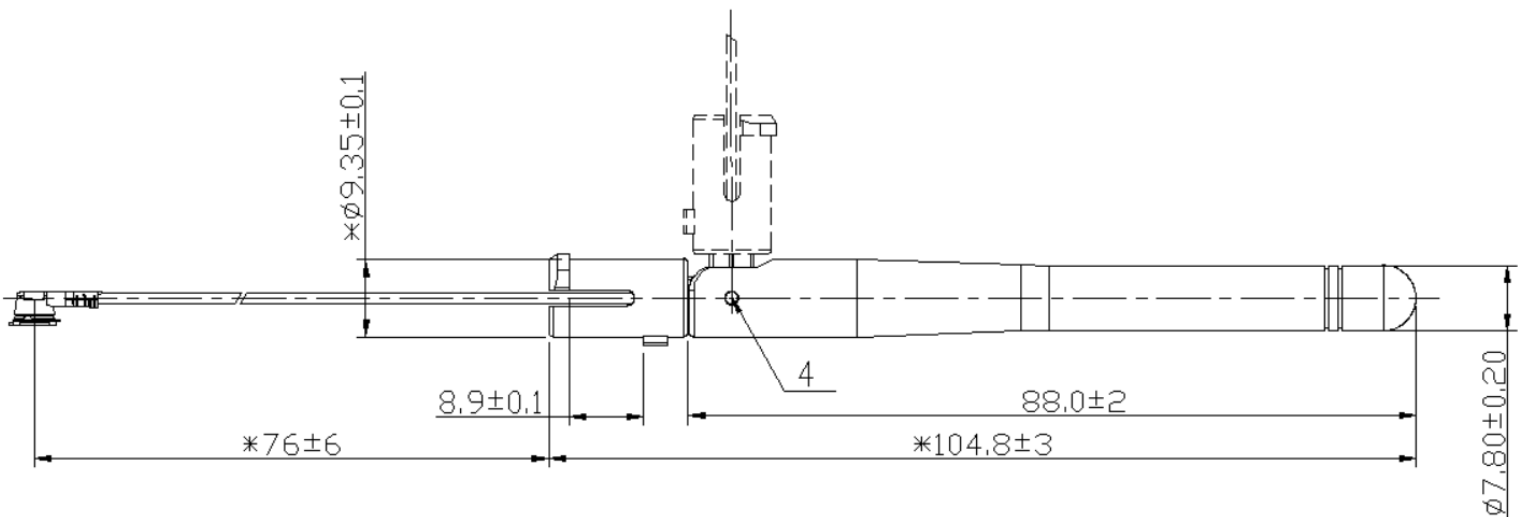
Operating Temperature	-40 ~ +85 ° C
Storage Temperature	-40 ~ +85 ° C
Ingress protection Rating	IP 20 Indoor use
RoHS Compliant	Yes

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MECHANICAL DRAWING



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## TEST SETUP

### SETUP1:



### SETUP2:



Note: Free space radiation pattern is tested only in SETUP1.

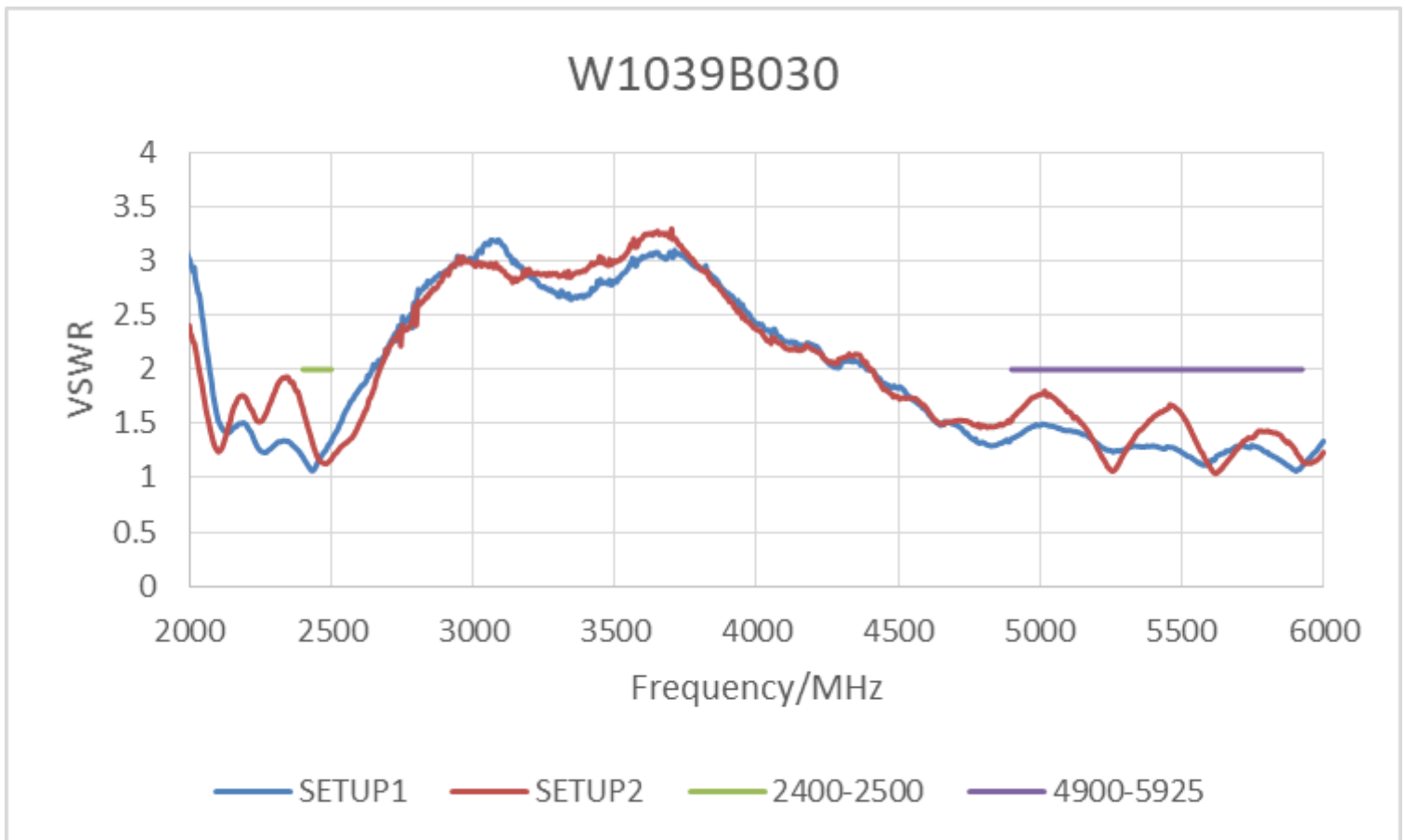
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## CHARTS

### Voltage standing-wave ratio



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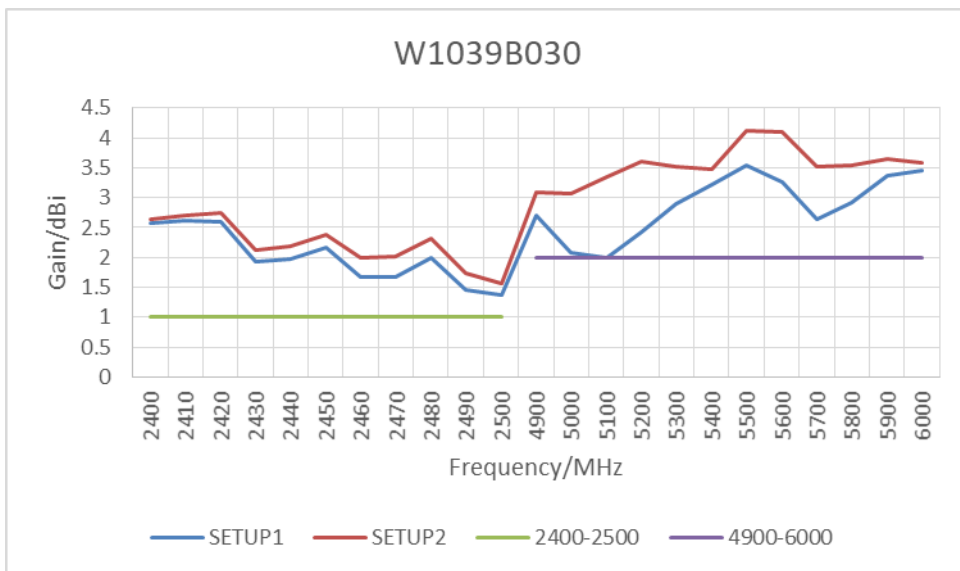
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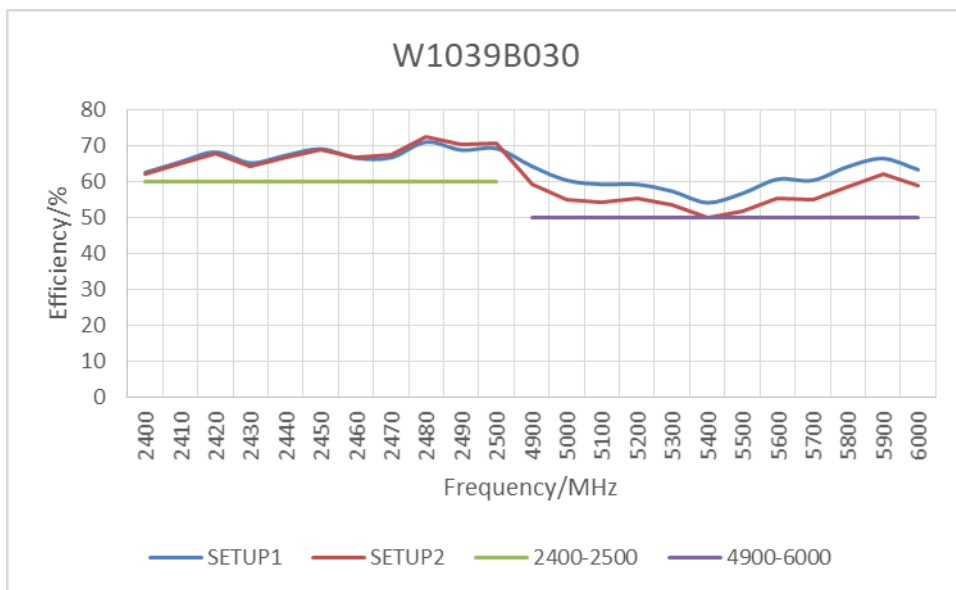
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## CHARTS

### Peaking Gain



### Radiation Efficiency



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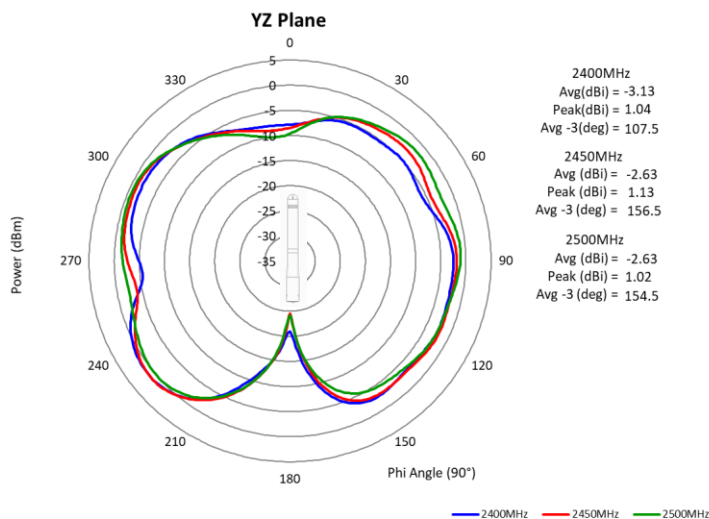
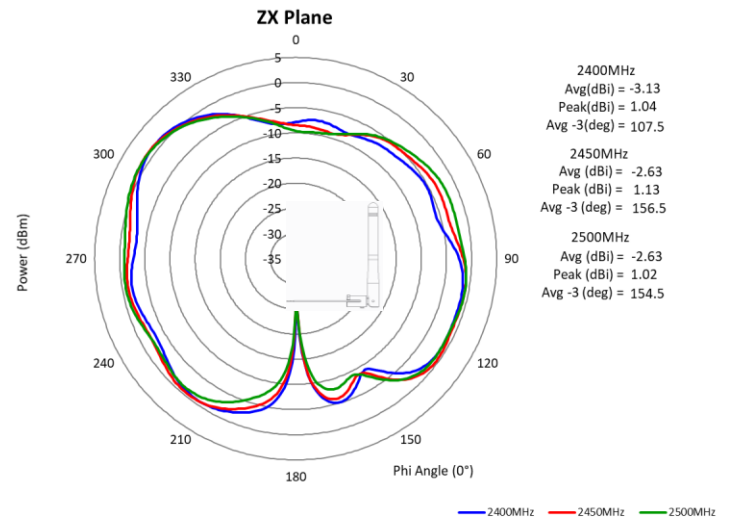
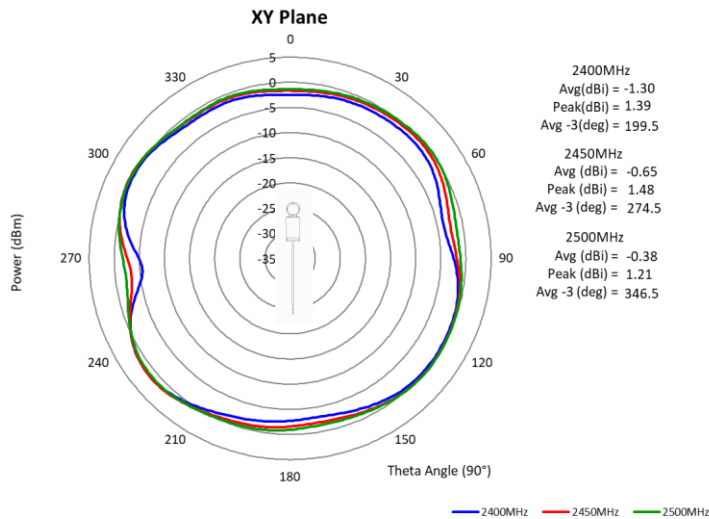
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## CHARTS

### Free space Radiation Patterns/2400-2500MHz



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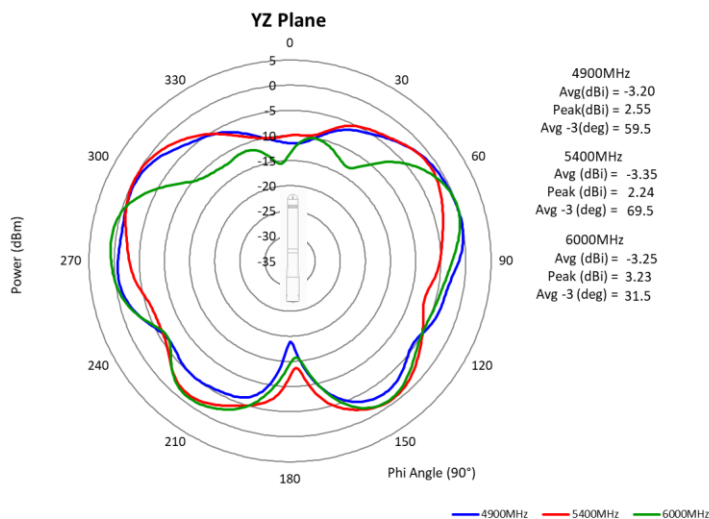
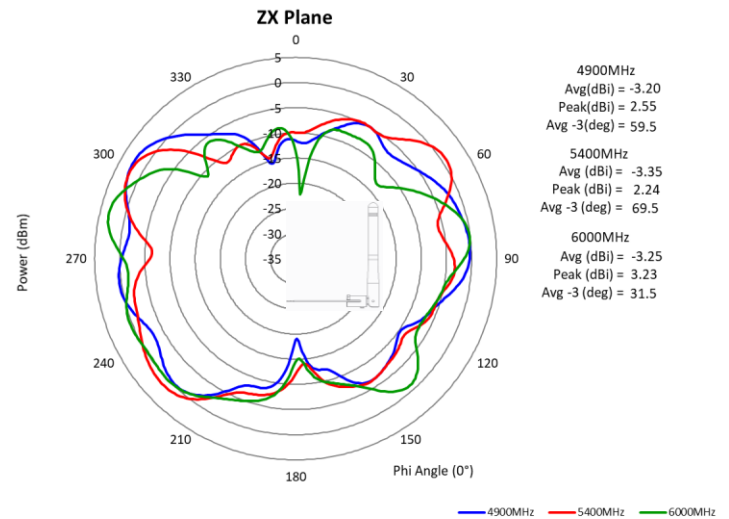
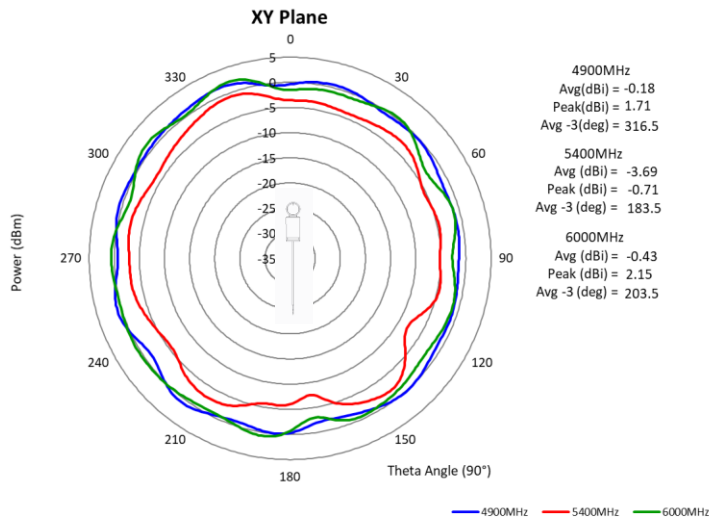
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## CHARTS

### Free space Radiation Patterns/4900-6000MHz



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## PACKAGING

**Quantity: 1000 PCS per Box**

### Packaging Steps:

1. Place 25pcs products into PE bag
2. Apply HF & RoHS label onto PE bag and seal bag.

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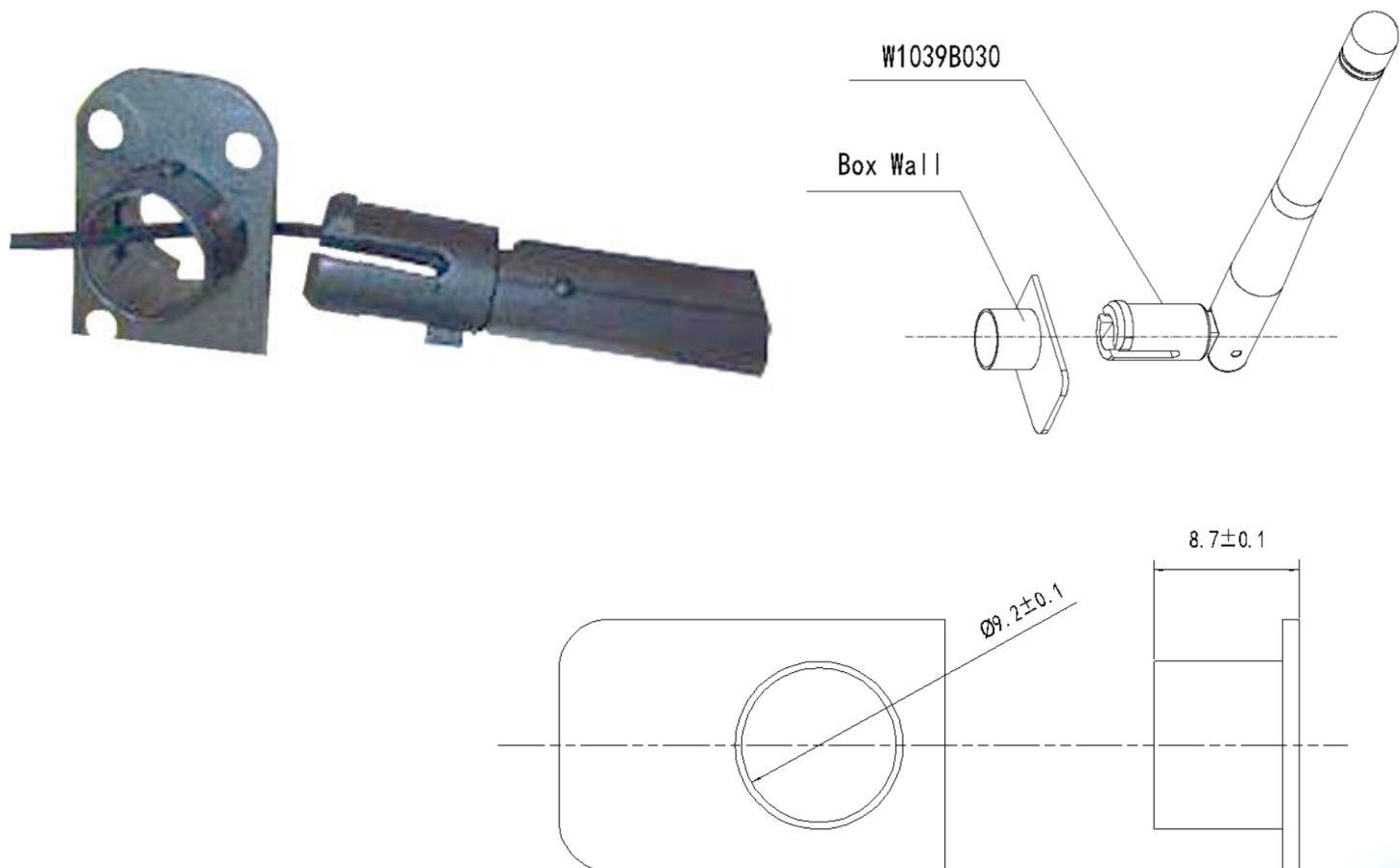
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## ASSEMBLY

The antenna has two kinds of mounting method

**Option 1.** If the box wall has the support structure as below, the antenna just directly insert into the hole of the box wall. The suggestion hole size is shown in the drawing.



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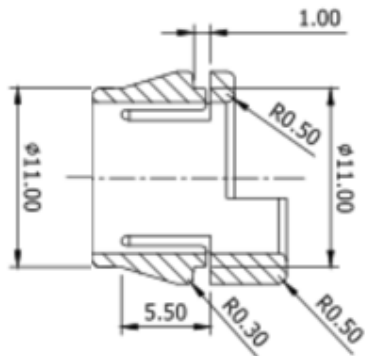
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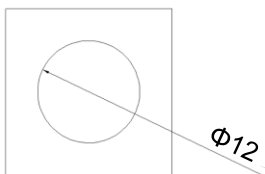
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**Option 2.** If the box wall is flat wall, the antenna need to be assembled with the plastic mounting grommet we provide firstly, then insert the product into the hole of the box wall. The suggestion hole size is  $\Phi 12\text{mm}$ , the wall thickness should be less than 1mm.



Plastic Mounting Grommet



Box Wall

W1039B030

