

**Description**:

470-510 MHz RA Stick Dipole – SMA-M

Series: Stick Antenna

PART NUMBER: W1099



## **Features:**

- Frequency 470-510MHz
- Gain 1dBi
- Length 128mm
- Connector SMA-Male
- IP42
- RoHS Compliant

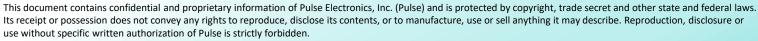
## **Applications:**

- China ISM radios operating on 470-510MHz license free band
- Indoor use
- · Remote controls
- Surveillance, Monitoring
- Industry automation
- IoT

All dimensions are in mm / inches

#### Issue: 1850

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



For more information: Pulse Worldwide Headquarters

15255 Innovation Drive #100 San Diego, CA 92128 USA Tel:1-858-674-8100 Pulse/Larsen Antennas 18110 SE 34<sup>th</sup> St Bldg 2 Suite 250 Vancouver, WA 98683 USA Tel: 1-360-944-7551 Europe Headquarters Pulse GmbH & Do, KG Zeppelinstrasse 15 Herrenberg, Germany Tel: 49 7032 7806 0 Pulse (Suzhou) Wireless Products Co, Inc. 99 Huo Ju Road(#29 Bldg,4<sup>th</sup> Phase Suzhou New District Jiangsu Province, Suzhou 215009 PR China Tel: 86 512 6807 9998





**Description**:

470-510 MHz RA Stick Dipole – SMA-M

Series: Stick Antenna

PART NUMBER: W1099

### **ELECTRICAL SPECIFICATIONS**

Antenna Type	Dipole
Frequency	470-510MHz
Nominal Impedance	50 Ω
VSWR	3:1(MAX)
Radiation Pattern	Omni
Gain	1dBi(typical)
Efficiency	65%(typical)
Polarization	Vertical
Power Withstanding	5W

MECHANICAL SPECIFICATIONS
---------------------------

Overall Length	128 mm
Weight	15.9 g
Antenna Color	Black
Connector type	SMA Male R/A

ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature	-40~+85° C	
Storage Temperature	-40~+85° C	
Ingress Protection	IP42	
RoHS Compliant	Yes	

Issue: 1850

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



2



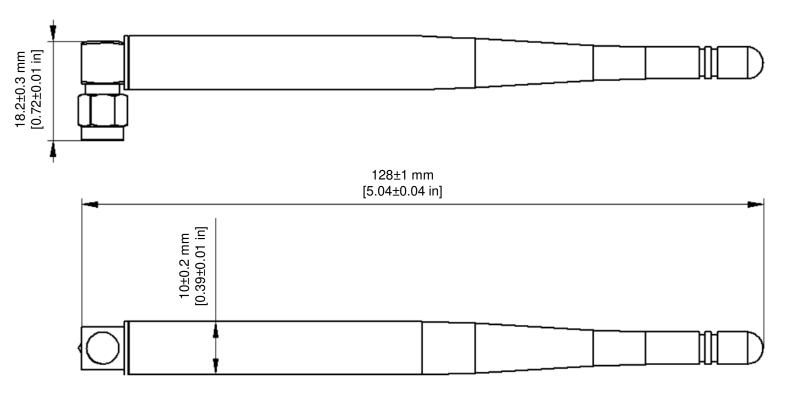
**Description**:

470-510 MHz RA Stick Dipole – SMA-M

Series: Stick Antenna

PART NUMBER: W1099

#### **MECHANICAL DRAWING**



Issue: 1850

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



3



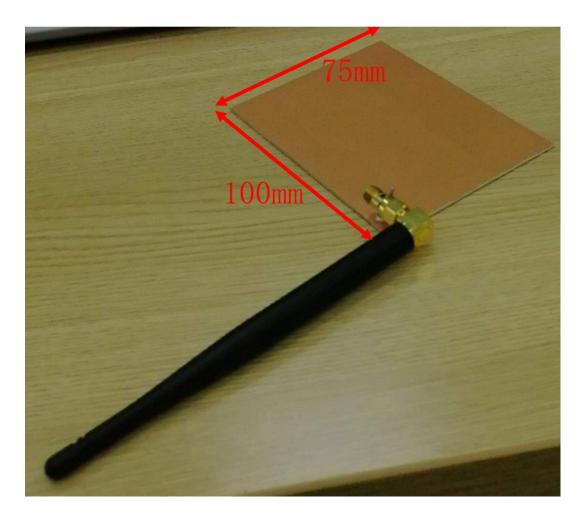
**Description**:

470-510 MHz RA Stick Dipole – SMA-M

Series: Stick Antenna

PART NUMBER: W1099

## **TEST SETUP**



Test with a 100mm\*75mm ground plane in free space.

Issue: 1850

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





**Description**:

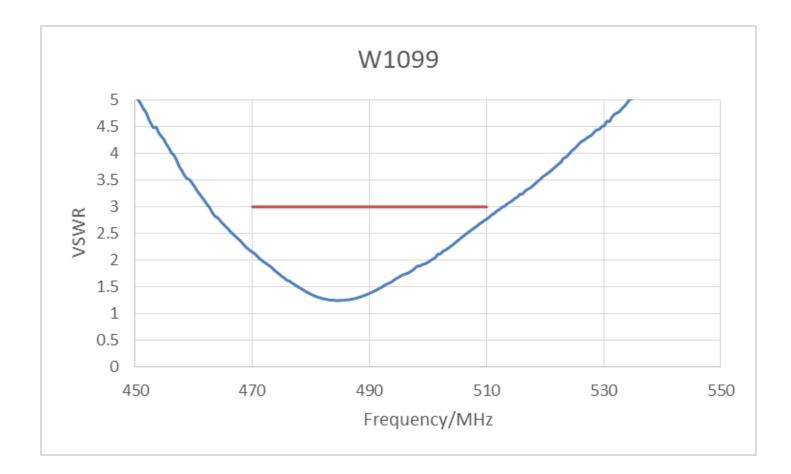
470-510 MHz RA Stick Dipole – SMA-M

Series: Stick Antenna

PART NUMBER: W1099

### **CHARTS**

# **VSWR vs Frequency**



#### Issue: 1850

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

5



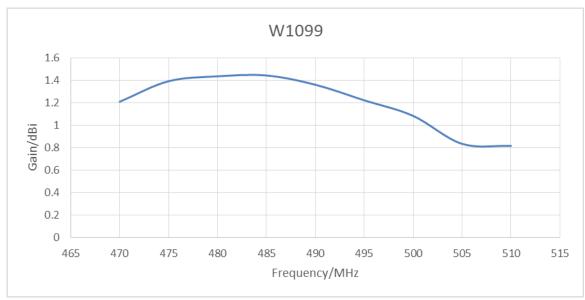
#### **Description**:

470-510 MHz RA Stick Dipole – SMA-M

Series: Stick Antenna

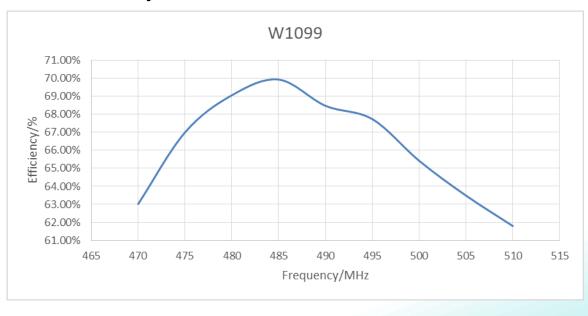
PART NUMBER: W1099

## **CHARTS**



# Peak Gain

# **Radiation Efficiency**



#### Issue: 1850

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



6



### **Description**:

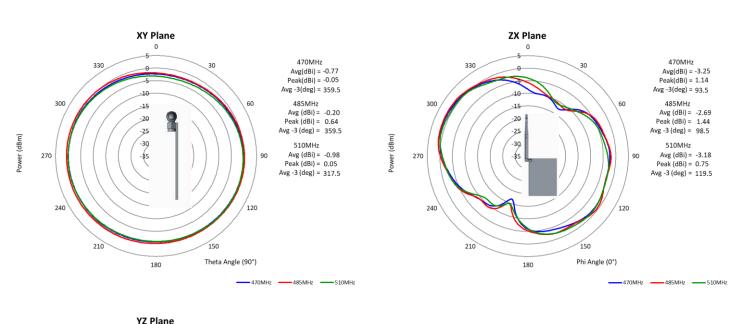
470-510 MHz RA Stick Dipole – SMA-M

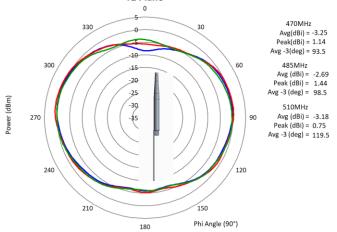
## Series: Stick Antenna

PART NUMBER: W1099

#### **CHARTS**

# **Radiation Pattern 2D**





#### Issue: 1850

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



7



**Description**:

470-510 MHz RA Stick Dipole – SMA-M

Series: Stick Antenna

PART NUMBER: W1099

### PACKAGING

20PCS / PE Bag, 800PCS / Box

Issue: 1850

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



8