

### **TECHNICAL DATA SHEET**

Description: 2.4-2.5GHz 1.3dBi IP67 RP-SMA

**External Stick Antenna** 

**PART NUMBER: W5039** 



### Features:

- Frequency 2400-2500MHz
- Quarter wave Dipole
- Gain 1.3dBi
- Vertical Polarization
- Omni radiation in Hor plane
- Length 93.79mm
- IP67
- Connector RP-SMA

## **Applications:**

- WiFi, Bluetooth, BLE, ZigBee
- ISM 2.4GHz radios
- Indoor / Outdoor applications
- Video / data transmission
- Security, surveillance, monitoring
- IoT, M2M

Issue: 1637

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

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Pulse Worldwide Headquarters 12220 World Trade Drive 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



Frequency

Average efficiency

**VSWR** 

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77

%

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**Series: Stick Antenna** PART NUMBER: W5039

## 2400-2500 MHz **Nominal Impedance** 50 Ω 2: 1

Peak Gain 1.3 dBi +/- 1 dB

**ELECTRICAL SPECIFICATIONS** 

Polarization: Vertical

Power withstanding 3 W

Connector type **RP SMA** 



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## **MECHANICAL SPECIFICATIONS**

Plastic radome TPE DSM CM600

Color Black

Ingress Protection IP67

Weight 11 g

Overall Length [3.7]93.79 [INCHES]MM

Flammability Rating UL94-V2

### **ENVIRONMENTAL SPECIFICATIONS**

Operating temperature -40/+85 ° C

Drop test 1 meter to tile 10 times

Storage Temperature -40°C to +85°C 24 hours

Corrosion Salt Spray 2h+1 week, two cycle

Vibration duration 3x15 minutes 3 planes 45 minutes

Mechanical Shocks 20g / 11mS half-sine

Temperature shock -35°C to +65°C 15 deg.C/min, 3 cycles

Radome Retention >20 lbsf

UV Rating ISO 4892-3 2006

Wind-loading 125 Mph

Product Lifespan Estimate 20 Years

ROHS

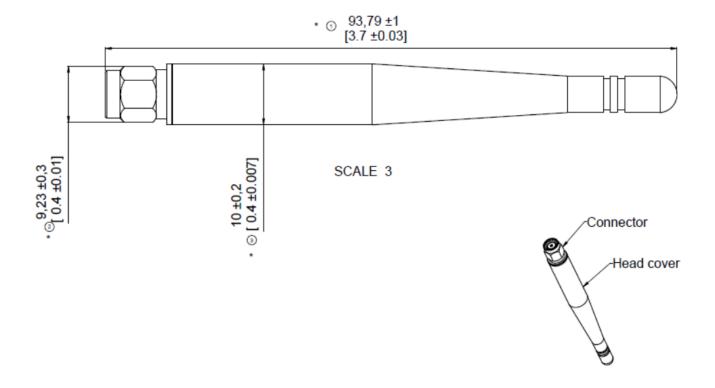


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## **MECHANICAL DRAWING**





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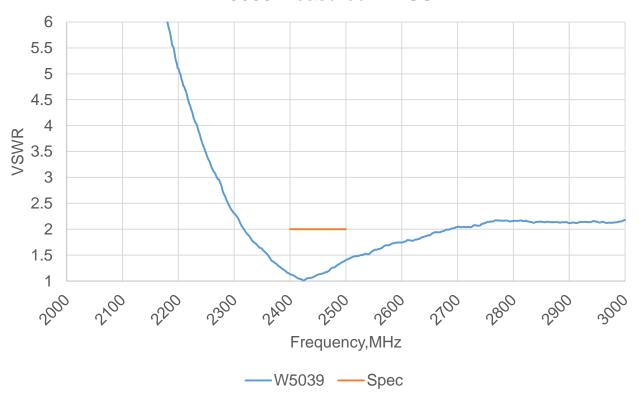
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## **CHARTS**

## **VSWR**

# VSWR vs Frequency measured in free space W5039 measured in PSU









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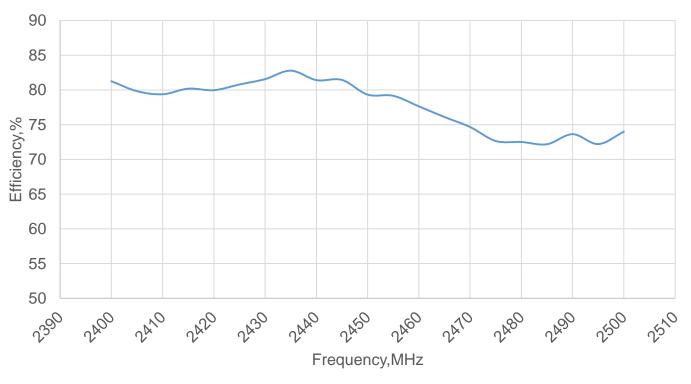
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## **CHARTS**

## Efficiency

# Efficiency vs Frequency measured in free space W5039 measured in PSU



----W5039







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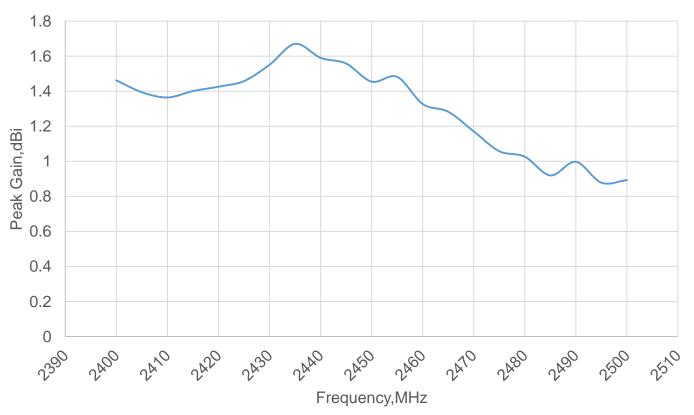
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## **CHARTS**

## Peak Gain

# Peak Gain vs Frequency measured in free space W5039 measured in PSU



----W5039



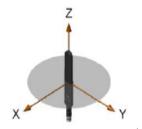


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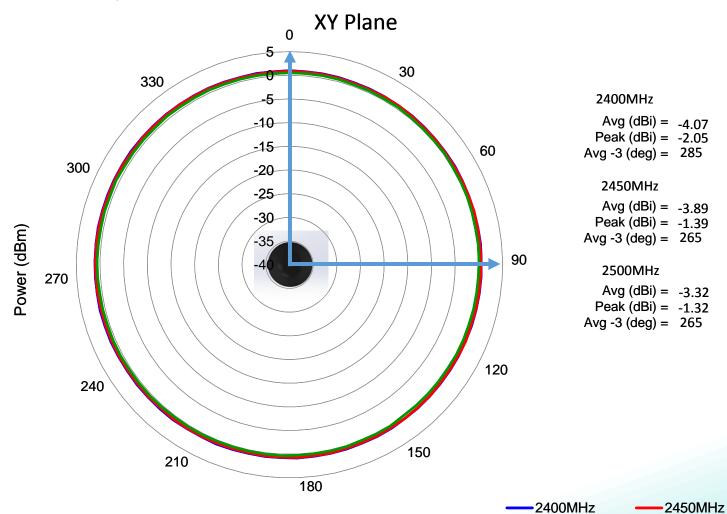
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### **CHARTS**



## **Gain Plots**



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2500MHz

Phi Angle (°)

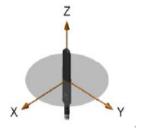


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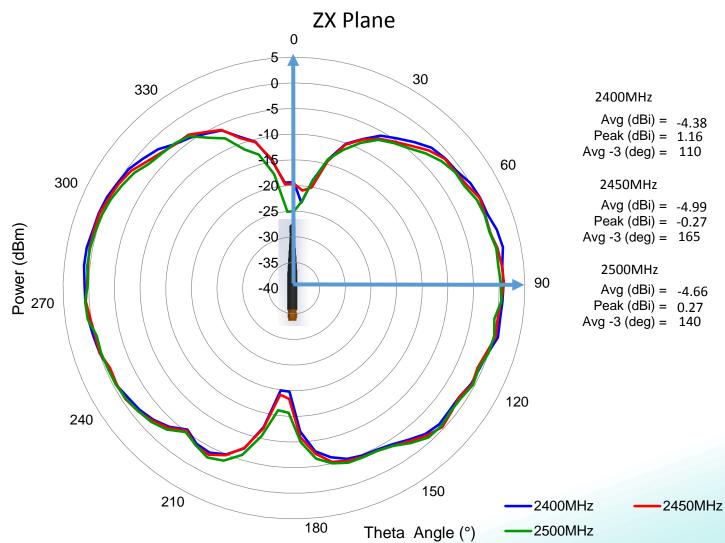
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### **CHARTS**



## Gain Plots



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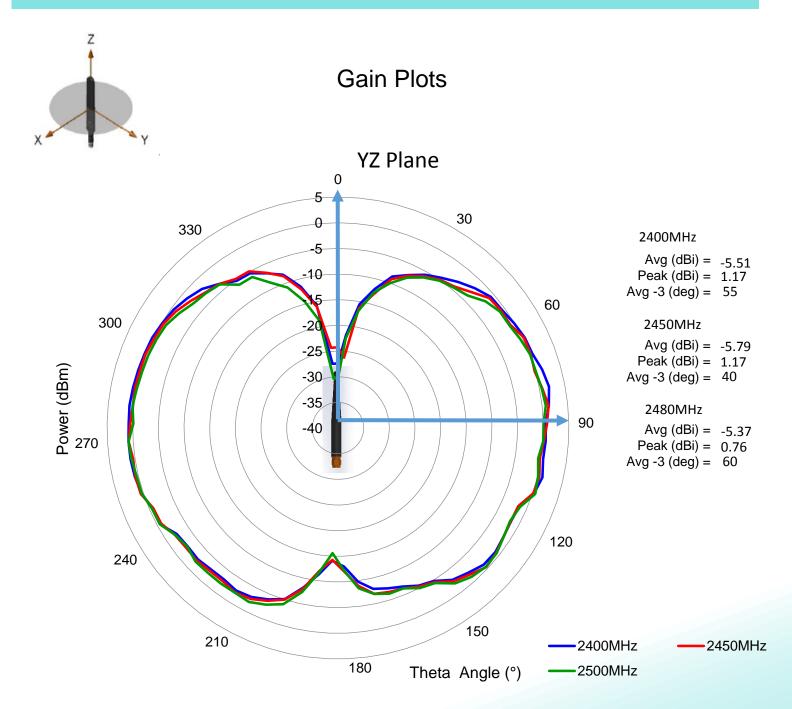


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### **CHARTS**





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## **PACKAGING**

Bullet PE bag packing 35PCS/PE bag 20 bags (700PCS)/carton box



