

**Description**: Wide Band LTE Monopole Antenna

**Series: Internal PCB Antenna** 

PART NUMBER: W3404SMA



### Features:

- Vertical mount on PCB
- Size W x L x H
  - 42.4 x 31.0 x 0.7mm
- Gain 2.2 / 4.4 dBi
- Efficiency 80 / 66 %
- RoHS compliant
- SMA male connector

# **Applications:**

- LTE 698-960 MHz, LTE 1710-2690 MHz.
- GSM bands (GSM850, EGSM900, PCN1800, PCS1900), WCDMA band 1
- LTE Cat1M
- NBIoT

All dimensions are in mm / inches

Issue: 1924

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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## **ELECTRICAL SPECIFICATIONS**

Antenna Type	Vertical mount monopole
Frequency	698-960/1710-2690 MHz
Nominal Impedance	50 Ω
Return Loss	-10 dB
Radiation Pattern	Omni
Average Total Efficiency (698-960MHz)	80%
Average Total Efficiency (1710-2690MHz)	66%
Peak Gain (698-960MHz)	2.2 dBi
Peak Gain (1710-2690 MHz)	4.4 dBi
Polarization	Linear
Power Withstanding	3W

All RF parameters measured on 70mm X 140mm evaluation board.





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# **MECHANICAL SPECIFICATIONS**

Overall Length 42.4 x 31.0 x 0.7mm

Antenna Color / Material PCB black

Connector type Edge mount SMA Plug

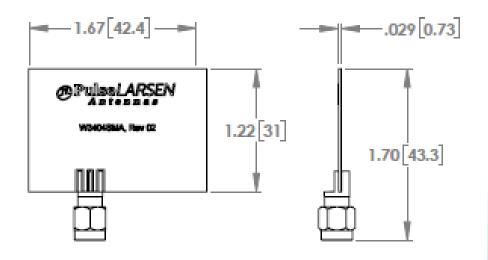
Weight 15g

### **ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature 40 - 85° C Storage Temperature 5 - 23° C

RoHS Compliant Yes

### **MECHANICAL DRAWING**



Issue: 1924

ROHS

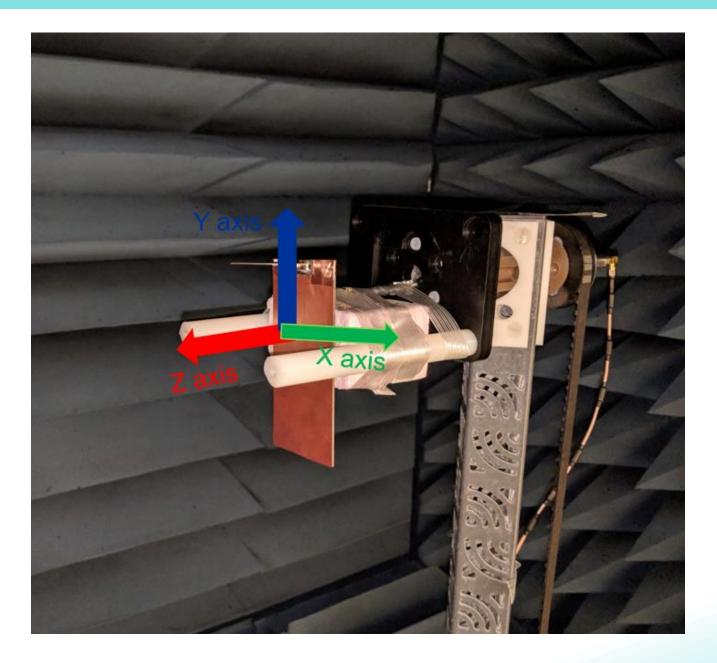


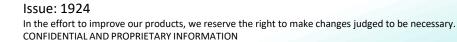
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## **TEST SETUP**









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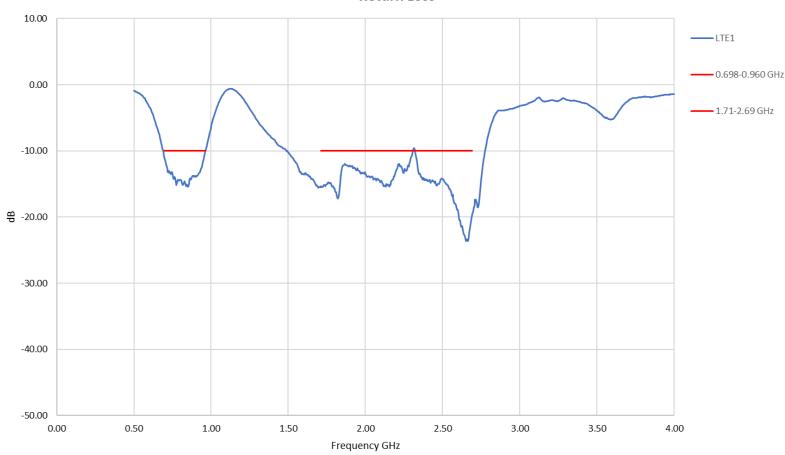
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### **CHARTS**

## **Return Loss**

#### **Return Loss**







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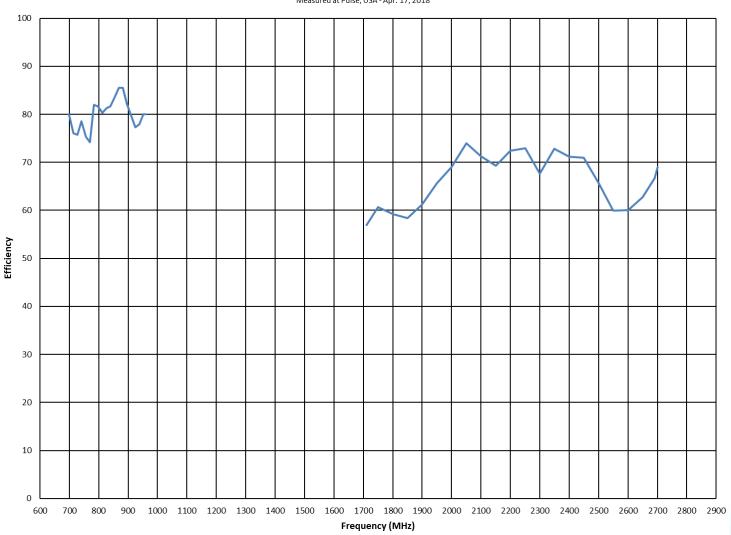
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### **CHARTS**

# **Efficiency %**

Efficiency vs. Frequency Measured at Pulse, USA - Apr. 17, 2018





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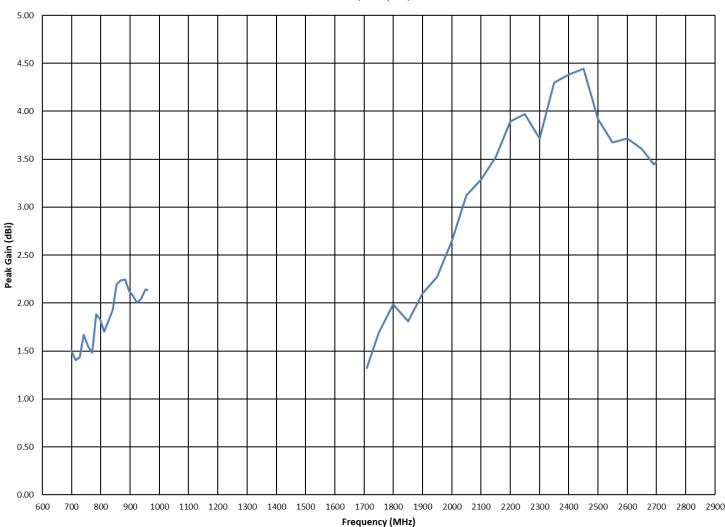
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### **CHARTS**

## **Peak Gain**

#### Peak Gain vs. Frequency

Measured at Pulse, USA - Apr. 17, 2018



Issue: 1924







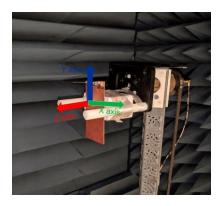
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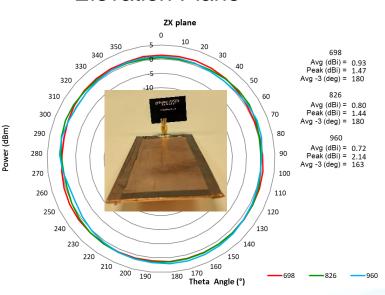
Free space radiation pattern: 698 MHz- 960 MHz



# Horizontal Plane

#### Avg (dBi) = -2.27 Peak (dBi) = 0.68 330 320 310 Avg (dBi) = -2.80 Peak (dBi) = 0.11 300 Power (dBm) 290 80 960 Avg (dBi) = -1.92 Peak (dBi) = 0.98 Avg -3 (deg) = 89 280 100 270 260 110 130 140 150 210 160 170 Phi Angle (°) 200 826

# **Elevation Plane**







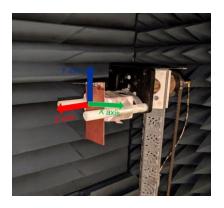
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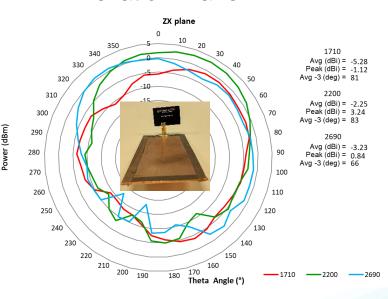
Free space radiation pattern: 1710 MHz- 2690 MHz



# Horizontal Plane

#### 1710 340 Avg (dBi) = -2.48 Peak (dBi) = 0.19 Avg -3 (deg) = 50 320 2200 310 Avg (dBi) = -3.09 Peak (dBi) = -0.24 Avg -3 (deg) = 114 300 290 2690 Avg (dBi) = -2.51 Peak (dBi) = 0.91 280 90 Avg -3 (deg) = 152 270 100 260 110 120 130 140 220 150 210 200 160 1710 -2200 Phi Angle (°)

# **Elevation Plane**





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### **PACKAGING**

Per package tray 24pcs product

Per carton box 19pcs tray + 1pcs extra empty tray

Total: 456 pcs product

Big box dimensions (MM): 285x375x200MM

# 单击下面可查看定价,库存,交付和生命周期等信息

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