

TECHNICAL DATA SHEET

Description: 4G/5G 617-3800MHz

Monopole Stick Antenna

PART NUMBER: W1696/W1697/W1696-M



W1696 / W1697

Features:

- Frequency 617-3800MHz
- Small form factor monopole
- Antenna size W x H:
 W1696 / W1697 (10 x 49.6mm), IP42
 W1696-M (12 x 50mm), IP65
- Connector Type:
 W1696 / W1696-M SMA (male)
 W1697 RP-SMA (male)



W1696-M

Applications:

- 4G LTE/LTE-A, 5G NR
- LTE CAT1M
- NBIoT
- CBRS US B48
- Gateways, Set Top boxes
- Telemetry, High speed data
- IoT and M2M solutions

All dimensions are in mm / inch

Issue: 1902

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

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden. 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 34th 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,4th Phase Suzhou New District Jiangsu Province, Suzhou 215009 PR China Tel: 86 512 6807 9998



TECHNICAL DATA SHEET

Description: 4G/5G 617-3800MHz

Monopole Stick Antenna

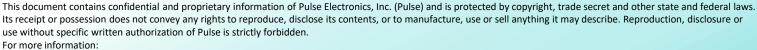
PART NUMBER: W1696/W1697/W1696-M

ELECTRICAL SPECIFICATIONS

Frequency / MHz	617-960	1710-2690		3400-3800
Nominal Impedance	50Ω			
Return Loss / dB	<-5	<-5		<-4
Peak Gain / dBi	>-0.5	>1		>0
Efficiency	40%	45%		30%
Radiation Pattern	Omni			
Polarization	Linear			
Power withstanding	5W			

Issue: 1902

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







TECHNICAL DATA SHEET

Description: 4G/5G 617-3800MHz

Monopole Stick Antenna

PART NUMBER: W1696/W1697/W1696-M

MECHANICAL SPECIFICATIONS

Weight W1696 / W1697: 7.5g

W1696-M: 7.8g

Antenna Color Black

Connector type W1696 / W1696-M SMA(Male)

W1697 RP-SMA(Male)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature -30/+85 ° C

Storage Temperature -30/+85 ° C

Ingress Protection IP65 (W1696-M)

IP42 (W1696 and W1697)

Wind-loading 100km/h

RoHS Compliant Yes





TECHNICAL DATA SHEET

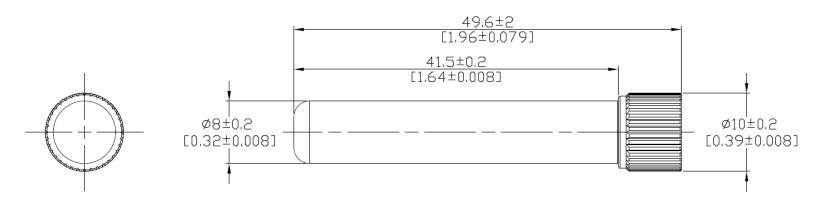
Description: 4G/5G 617-3800MHz

Monopole Stick Antenna

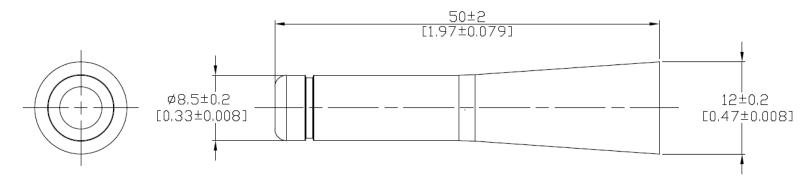
PART NUMBER: W1696/W1697/W1696-M

MECHANICAL DRAWING

W1696 / W1697



W1696-M





TECHNICAL DATA SHEET

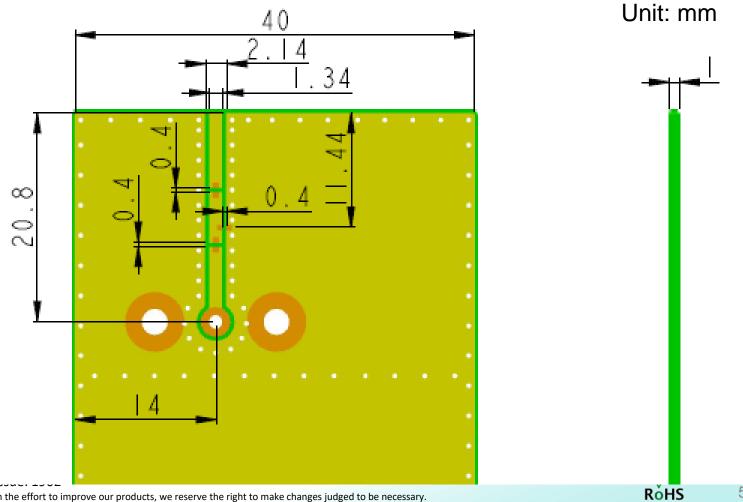
Description: 4G/5G 617-3800MHz

Monopole Stick Antenna

PART NUMBER: W1696/W1697/W1696-M

TEST SETUP 120.0mm

#Test on 40.0*120.0mm ground plane with matching circuit.



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



TECHNICAL DATA SHEET

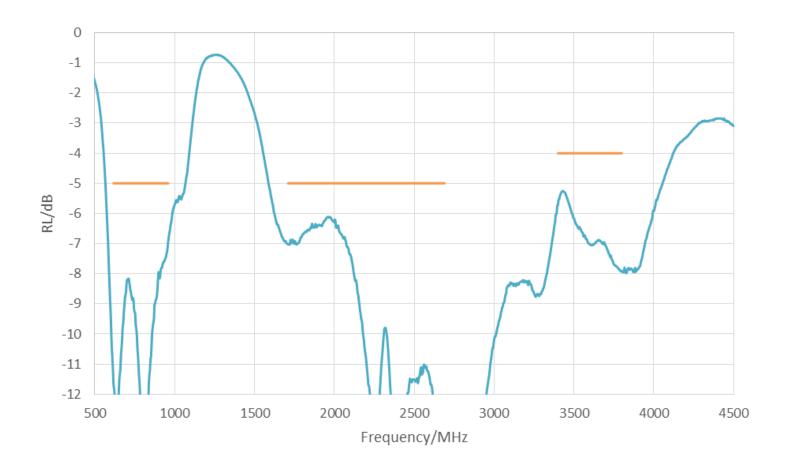
Description: 4G/5G 617-3800MHz

Monopole Stick Antenna

PART NUMBER: W1696/W1697/W1696-M

CHARTS

Return Loss vs Frequency







TECHNICAL DATA SHEET

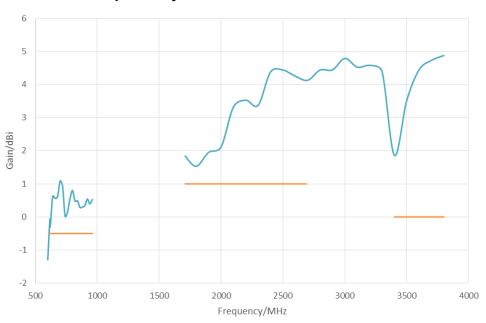
Description: 4G/5G 617-3800MHz

Monopole Stick Antenna

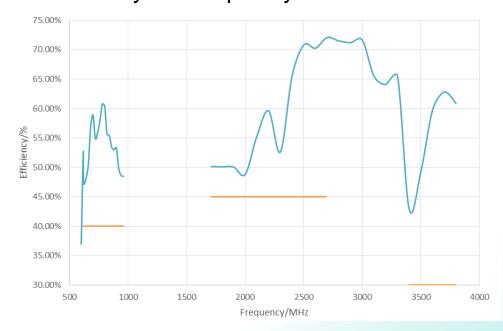
PART NUMBER: W1696/W1697/W1696-M

CHARTS

Peak Gain vs Frequency



Radiation Efficiency vs Frequency



Issue: 1902



TECHNICAL DATA SHEET

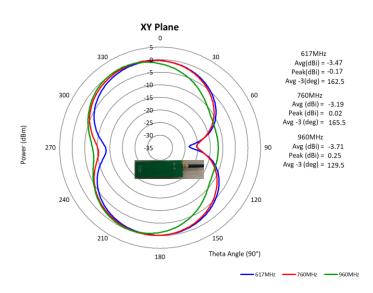
Description: 4G/5G 617-3800MHz

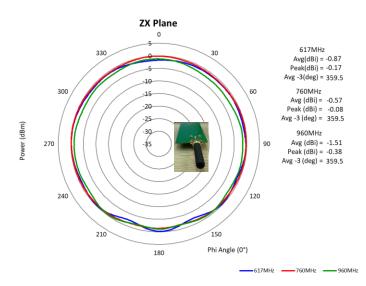
Monopole Stick Antenna

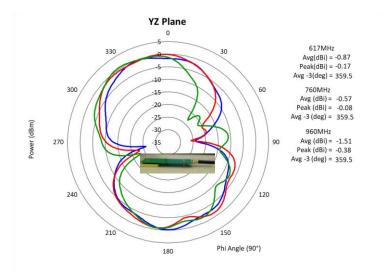
PART NUMBER: W1696/W1697/W1696-M

CHARTS

Free Space Radiation Pattern(617-960MHz)









TECHNICAL DATA SHEET

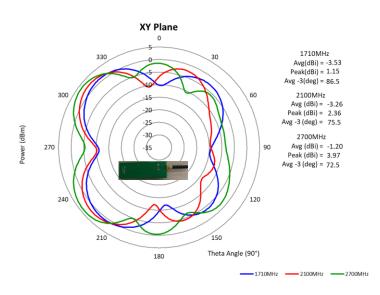
Description: 4G/5G 617-3800MHz

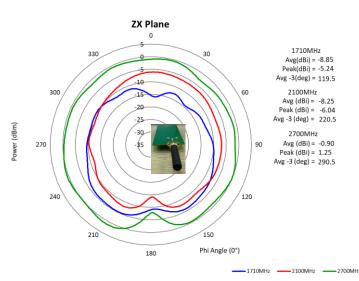
Monopole Stick Antenna

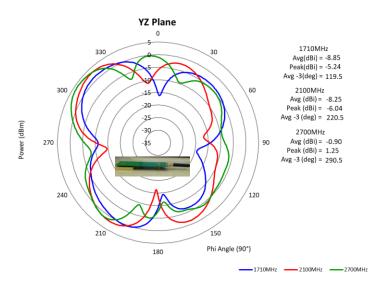
PART NUMBER: W1696/W1697/W1696-M

CHARTS

Free Space Radiation Pattern(1710-2690MHz)











TECHNICAL DATA SHEET

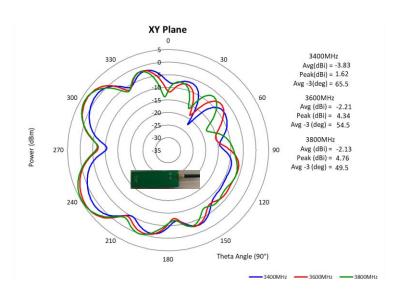
Description: 4G/5G 617-3800MHz

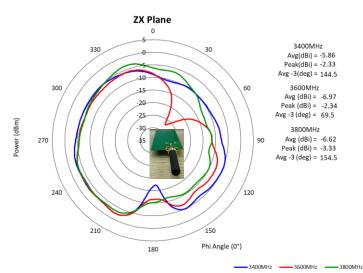
Monopole Stick Antenna

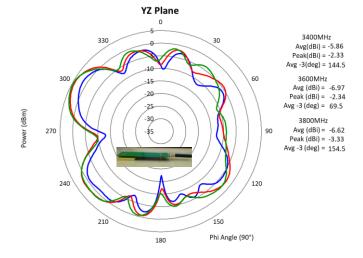
PART NUMBER: W1696/W1697/W1696-M

CHARTS

Free Space Radiation Pattern(3400-3800MHz)











TECHNICAL DATA SHEET

Description: 4G/5G 617-3800MHz

Monopole Stick Antenna

PART NUMBER: W1696/W1697/W1696-M

PACKAGING

1pcs antenna per PE bag

24pcs PE bags per tray

14pcs trays per package box(2 pcs empty tray)

288pcs antenna per package

Package box: 460mm*235mm*140mm



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Pulse:

W1696-M W1696 W1697