

Series: Stick Antenna

TECHNICAL DATA SHEET Description: 698-960/1710-3800MHz Stick Antenna with RA SMA connector

PART NUMBER: W1096X

Features:

- 4G/5G Stick Antenna
- Performance across the LTE frequency bands
- 698-960/1710-2690/3400-3800 MHz
- · Up to 2 dBi Gain
- Right Angle SMA or RP SMA Male connector
- IP65

Applications:

- 4G / 5G Radios
- Router, Hub or Access point
- Small Base Station
- Femto Cell
- SOHO

All dimensions are in mm / inches

Issue: 2033

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







Description: 698-960/1710-3800MHz Stick Antenna with RA SMA connector

Series: Stick Antenna

PART NUMBER: W1096X

This document covers all product variants of the following product family

Antennas	Connector
W1096	RA RP SMA Male
W1096RM	RA SMA Male

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



2



Description: 698-960/1710-3800MHz Stick Antenna with RA SMA connector

Series: Stick Antenna

PART NUMBER: W1096X

ELECTRICAL SPECIFICATIONS

Antenna Type	Monopole antenna
Frequency	698-960/1710-2690/3400-3800 MHz
Nominal Impedance	50 Ω
VSWR(Max)	3.5:1 / 2:1 / 4:1
Radiation Pattern	Omni
Gain 698-960MHz	>-3 dBi
Gain 1710-2690MHz	>1.5 dBi
Gain 3400-3800MHz	>-0.5 dBi
Efficiency 698-960MHz	>30 %
Efficiency 1710-2690MHz	>60 %
Efficiency 3400-3800MHz	>45 %
Polarization	Linear
Power Withstanding	3 W

MECHANICAL SPECIFICATIONS

Overall Length		
Weight		
Antenna Color / Material		
Connector type		

112±3mm 13q Black

W1096: Right Angle RP SMA Male, Silver Ni plating W1096RM: Right Angle SMA Male, Silver Ni plating

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Storage Temperature **Ingress Protection RoHS** Compliant

-40 °C to +80 °C -40 °C to +80 °C **IP65** Yes

Issue: 2033

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.



3

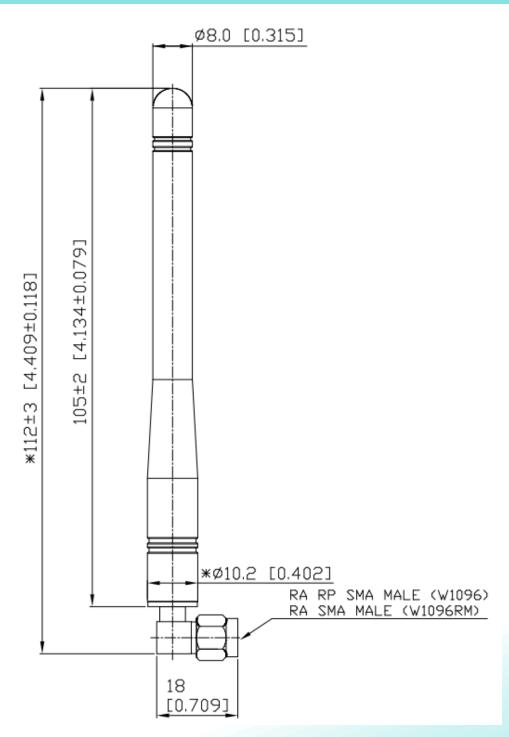


Description: 698-960/1710-3800MHz Stick Antenna with RA SMA connector

Series: Stick Antenna

PART NUMBER: W1096X

MECHANICAL DRAWING



Issue: 2033

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.



4



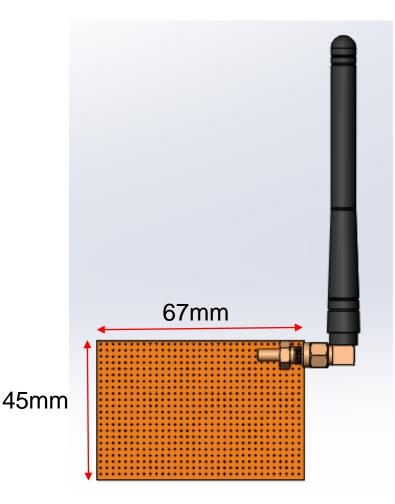
Series: Stick Antenna

Description: 698-960/1710-3800MHz Stick Antenna with RA SMA connector

PART NUMBER: W1096X

TEST SETUP

ground plane



Issue: 2033

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



5



Description: 698-960/1710-3800MHz Stick Antenna with RA SMA connector

Series: Stick Antenna

TEST SETUP

PART NUMBER: W1096X

VSWR:



Issue: 2033

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

6



Description: 698-960/1710-3800MHz Stick Antenna with RA SMA connector

Series: Stick Antenna

PART NUMBER: W1096X

Total radiated Efficiency

Efficiency curve:



Issue: 2033

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

7



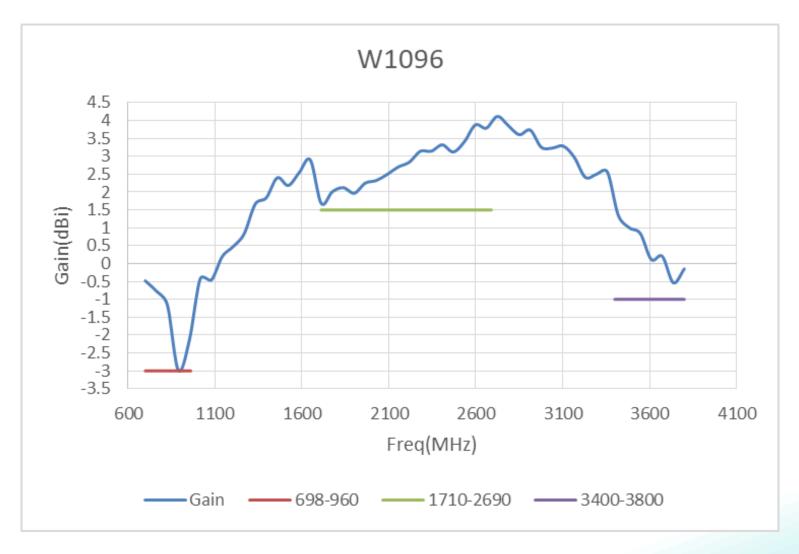
Description: 698-960/1710-3800MHz Stick Antenna with RA SMA connector

Series: Stick Antenna

PART NUMBER: W1096X

Maximum peak Gain

Peak gain curve:



Issue: 2033

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

8



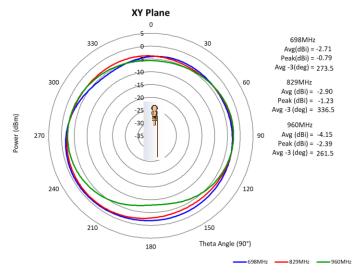
Description: 698-960/1710-3800MHz Stick Antenna with RA SMA connector

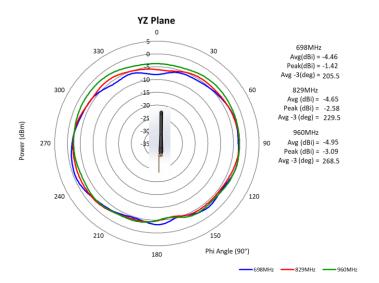
Series: Stick Antenna

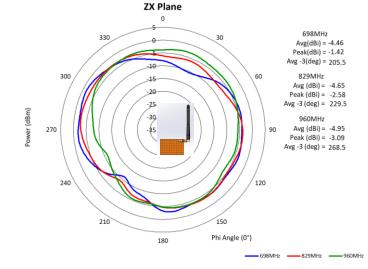
PART NUMBER: W1096X

CHARTS

Curves at 698, 829 and 960MHz :







Issue: 2033

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



9



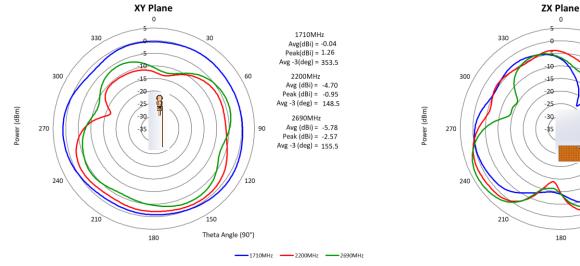
Description: 698-960/1710-3800MHz Stick Antenna with RA SMA connector

Series: Stick Antenna

PART NUMBER: W1096X

CHARTS

Curves at 1710, 2200 and 2690MHz:



YZ Plane 0 1710MHz 330 30 Avg(dBi) = -3.29 Peak(dBi) = 0.08Avg -3(deg) = 139.5 -10 300 2200MHz 60 -15 Avg (dBi) = -3.12 Peak (dBi) = 1.76 -20 -25 Avg -3 (deg) = 86.5 Power (dBm) -30 2690MHz Avg (dBi) = -2.56 Peak (dBi) = 3.38 270 -\$5 Avg -3 (deg) = 43.5 120 240 210 150 Phi Angle (90°) 180 1710MHz _____2200MHz ____ 2690MHz

1710MHz Avg(dBi) = -3.29 Peak(dBi) = 0.08 Avg -3(deg) = 139.5 2200MHz Avg (dBi) = -3.12 Peak (dBi) = 1.76 Avg -3 (deg) = 86.5 2690MHz Avg (dBi) = -2.56 Peak (dBi) = 3.38 90 Avg -3 (deg) = 43.5 120 150 Phi Angle (0°) 180 1710MHz -2200MHz 2690MH

Issue: 2033

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





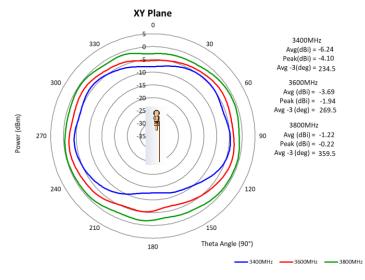
Description: 698-960/1710-3800MHz Stick Antenna with RA SMA connector

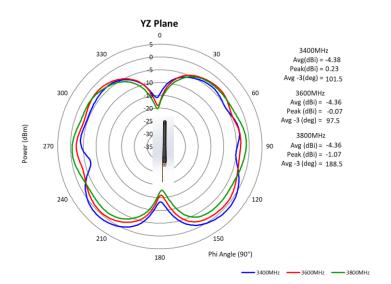
Series: Stick Antenna

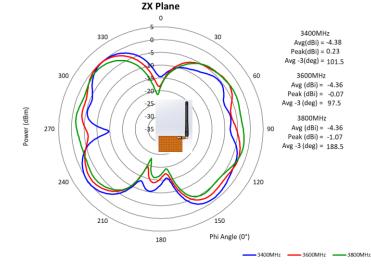
PART NUMBER: W1096X

CHARTS

Curves at 3400,3600 and 3800MHz :







Issue: 2033

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





Description: 698-960/1710-3800MHz Stick Antenna with RA SMA connector

Series: Stick Antenna

PART NUMBER: W1096X

PACKAGING



20pcs ants each small bag

ltem	QTY
Each small bag	20pcs
Each big bag	400pcs(20pcs small bags)
Each box	2000pcs

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



12

Mouser Electronics

Authorized Distributor

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

Pulse: W1096