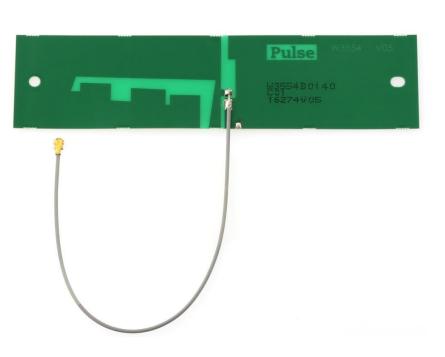


Series: Internal PCB Antenna

Description: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz PART NUMBER: W3554XXXXX



## **Features:**

- 698-6000MHz
- Size W x L x H (30mm x 120mm x 0.2mm)
- Low Weight (1.5g)
- RoHS Compliant
- · Coaxial Cable feed
- · Connector options:
  - U-FL
  - SMA
  - MMCX
  - Per request

## **Applications:**

- 2G/3G/4G/5G
- GNSS
- WiFi
- Bluetooth, BLE, Zigbee
- ISM 868, 915, 2400, 5000MHz



### Issue: 1835

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 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 1



**Description**: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz PART NUMBER: W3554XXXXX

TECHNICAL DATA SHEET

## Series: Internal PCB Antenna

This document covers all product variants of the following product family:

W3554B0140	143mm 1.13mm OD cable	U.FL compatible connector
W3554B0140T	143mm 1.13mm OD cable	U.FL compatible connector with ADH
W3554B0170	170mm 1.13mm OD cable	U.FL compatible connector
W3554B0293	293mm 1.13mm OD cable	U.FL compatible connector
W3554E0193	193mm 1.13mm OD cable	Right angle MMCX male connector
W3554G0100	100mm 1.13mm OD cable	SMA male connector
W3554G0254	254mm 1.13mm OD cable	SMA male connector
W3554G0384	384mm 1.37mm OD cable	SMA male connector
W3554G0457	457mm 1.13mm OD cable	SMA male connector
W3554K0153	153mm 1.37mm OD cable	Right angle SMA male connector

#### Issue: 1835

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 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



2



Series: Internal PCB Antenna

**Description**: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz

### PART NUMBER: W3554XXXXX

## **ELECTRICAL SPECIFICATIONS**

Frequency	698-960MHz, 1400-1600MHz,	
	1710-2690MHz, 3300-3800MHz, 4900-6000MHz	
Nominal Impedance	50 Ω	
Return Loss(698-960MHz)	-4dB	
Return Loss(1400-1600MHz)	-3dB	
Return Loss(1710-2690MHz)	-6dB	
Return Loss(3300-3800MHz)	-5dB	
Return Loss(4900-6000MHz)	-4dB	
Radiation Pattern	Omni	
Peak Gain(698-960MHz)	1.9dBi	
Peak Gain(1400-1600MHz)	2.5dBi	
Peak Gain(1710-2690MHz)	3.2dBi	
Peak Gain(3300-3800MHz)	3.3dBi	
Peak Gain(4900-6000MHz)	3.5dBi	
Average Efficiency(698-960MHz)	45%	
Average Efficiency(1400-1600MHz)	53%	
Average Efficiency(1710-2690MHz)	66%	
Average Efficiency(3300-3800MHz)	57%	
Average Efficiency(4900-6000MHz)	37%	
Polarization	Vertical	
Power Withstanding	5W	

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



3



Series: Internal PCB Antenna

**Description**: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz

### PART NUMBER: W3554XXXXX

## **MECHANICAL SPECIFICATIONS**

PCB size W x L x H	30 x 120 x 0.2	mm
Weight	1.5	g
Connector type	Optional	
Cable type	Optional	
Cable length	Optional	

Operating Temperature	-40/+85	° C
Storage Temperature	-40/+85	° C
RoHS Compliant		Yes

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



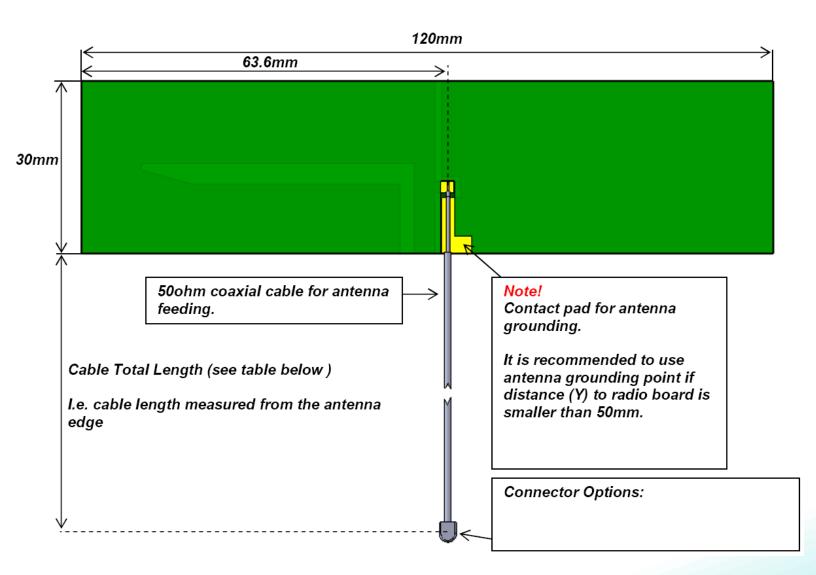
4



Description: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz PART NUMBER: W3554XXXXX

Series: Internal PCB Antenna

**MECHANICAL DRAWING** 



Issue: 1835

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



5



Series: Internal PCB Antenna

Description: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz PART NUMBER: W3554XXXXX

## TEST SETUP

Antenna was measured in Free Space Environment (FS) without test board presence.

Issue: 1835

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



6

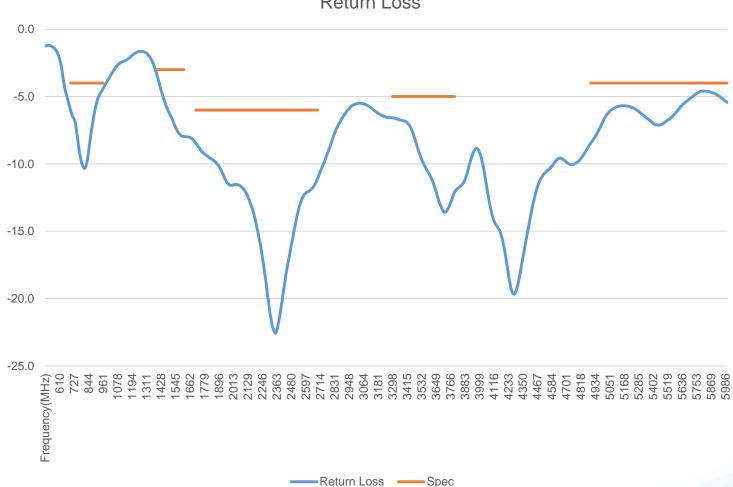


Series: Internal PCB Antenna

Description: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz PART NUMBER: W3554XXXXX

## **CHARTS**

## **Return Loss**



**Return Loss** 

### Issue: 1835

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

7

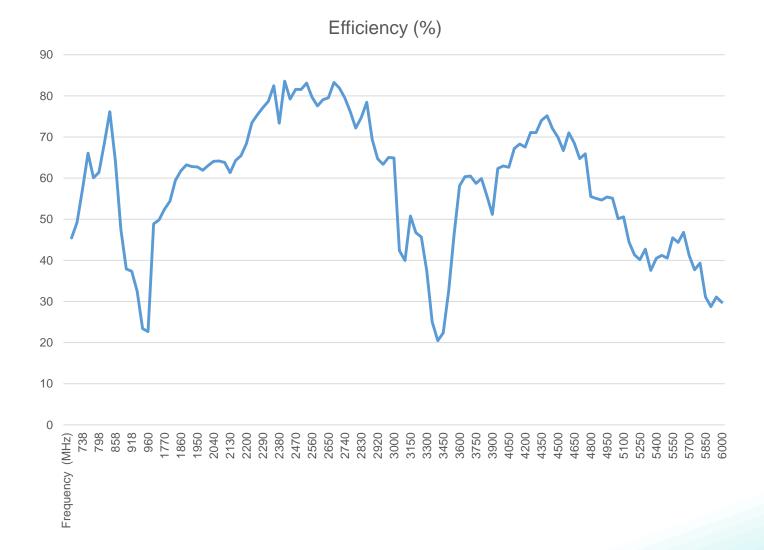


Series: Internal PCB Antenna

Description: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz PART NUMBER: W3554XXXXX

## CHARTS

## Efficiency



### Issue: 1835

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

8



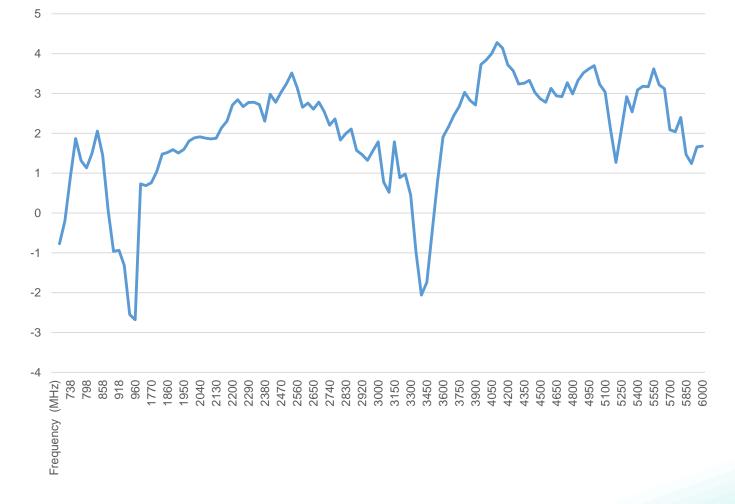
Series: Internal PCB Antenna

Description: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz PART NUMBER: W3554XXXXX

## CHARTS



Peak Gain (dBi)



Issue: 1835

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

9



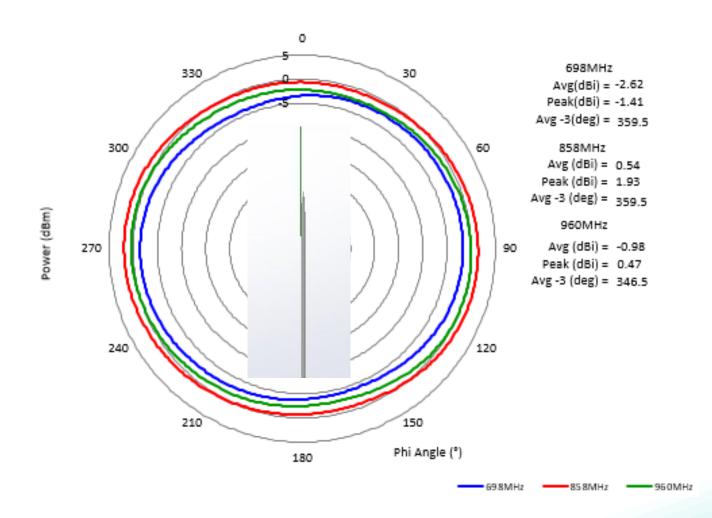
Series: Internal PCB Antenna

PART NUMBER: W3554XXXXX

## CHARTS

## Free Space Radiation Pattern

# Horizontal Plane



### Issue: 1835

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

ROHS 10



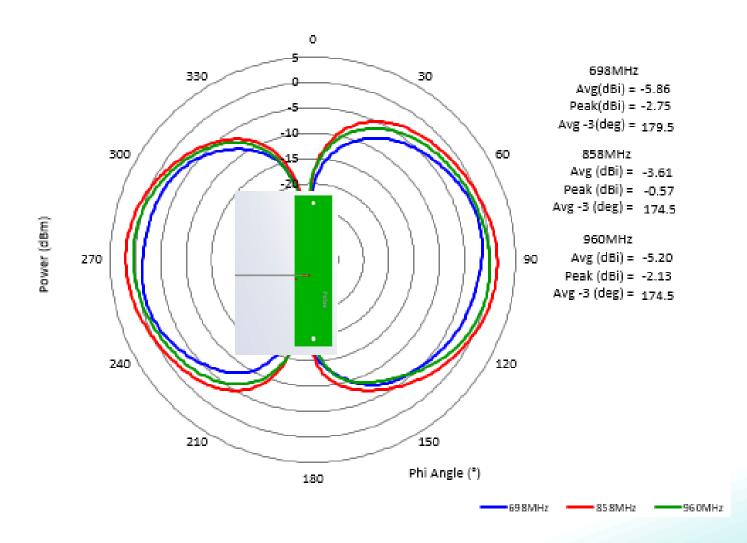
Series: Internal PCB Antenna

PART NUMBER: W3554XXXXX

### CHARTS

Free Space Radiation Pattern

# **Elevation Plane**



Issue: 1835

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

ROHS 11



**TECHNICAL DATA SHEET Description**: High Efficiency Ultra Wideband

Series: Internal PCB Antenna

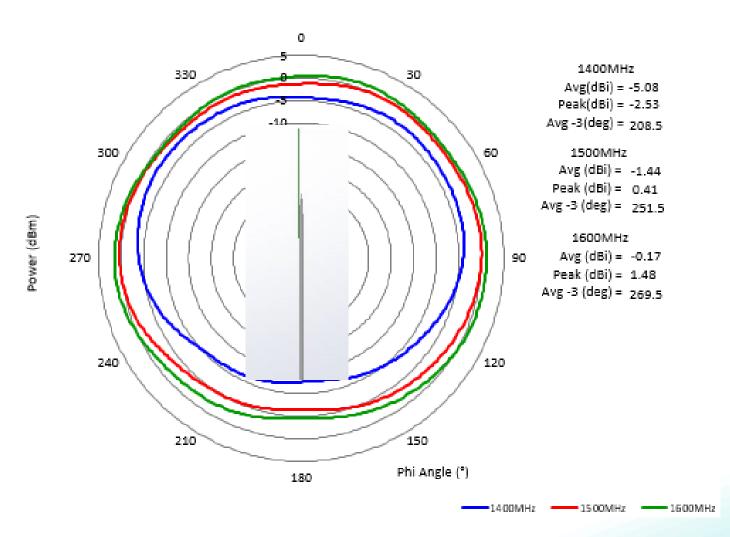
PART NUMBER: W3554XXXXX

Dipole Antenna 698-6000MHz

### **CHARTS**

## Free Space Radiation Pattern

# Horizontal Plane



#### Issue: 1835

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





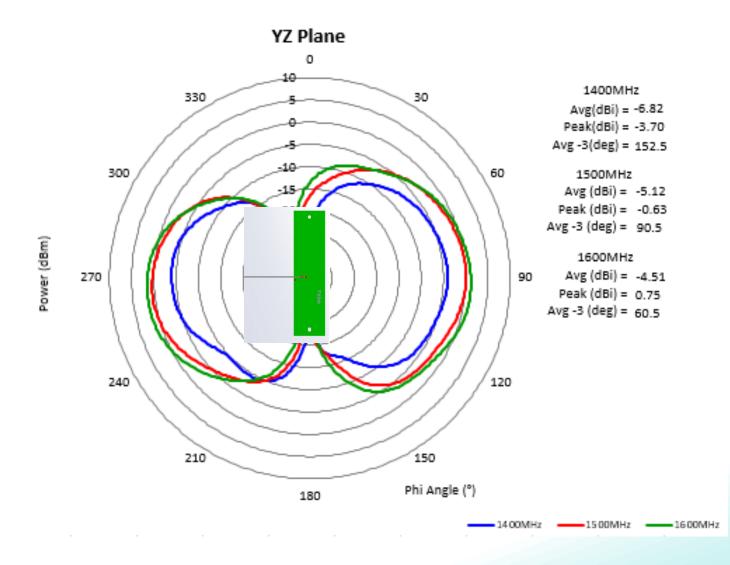
Series: Internal PCB Antenna

PART NUMBER: W3554XXXXX

### CHARTS

Free Space Radiation Pattern

# **Elevation Plane**



#### Issue: 1835

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

ROHS 13



**Description:** High Efficiency Ultra Wideband

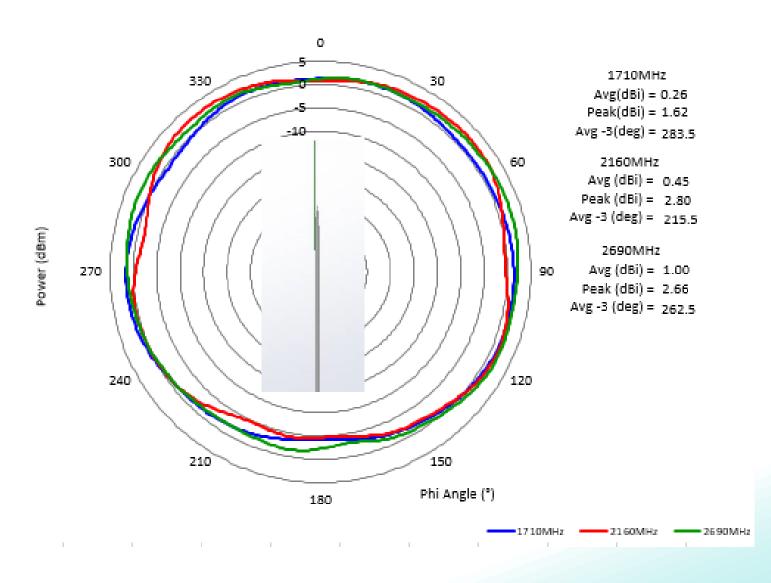
Series: Internal PCB Antenna

Dipole Antenna 698-6000MHz
PART NUMBER: W3554XXXXX

### CHARTS

Free Space Radiation Pattern

# Horizontal Plane



#### Issue: 1835

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

ROHS 14



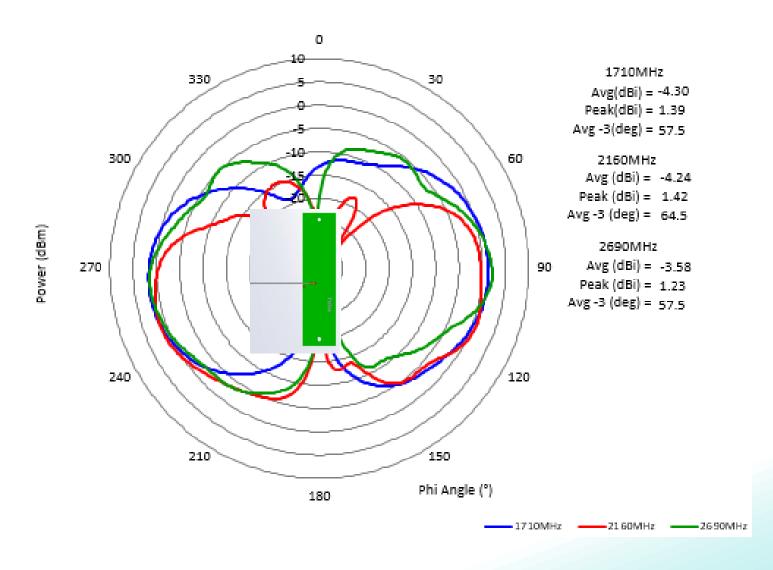
Series: Internal PCB Antenna

PART NUMBER: W3554XXXXX

## CHARTS

Free Space Radiation Pattern

# **Elevation Plane**





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

ROHS 15



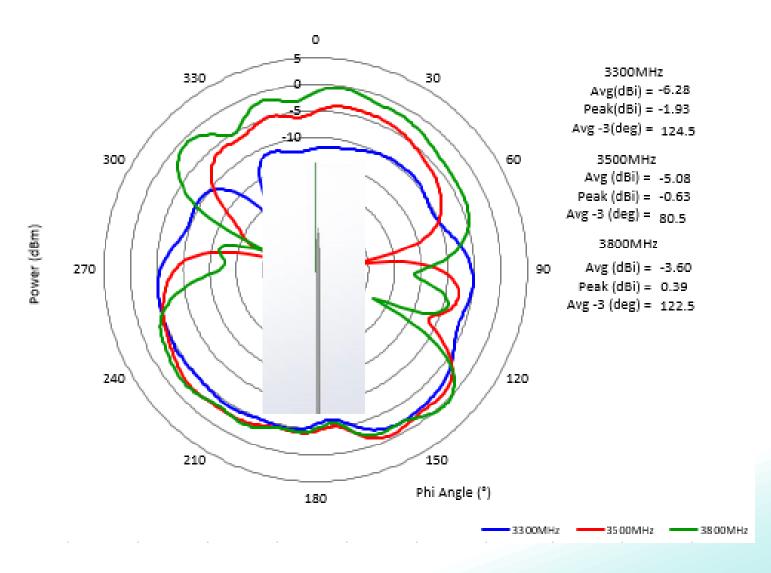
Series: Internal PCB Antenna

PART NUMBER: W3554XXXXX

### CHARTS

Free Space Radiation Pattern

# Horizontal Plane



#### Issue: 1835

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

ROHS 16



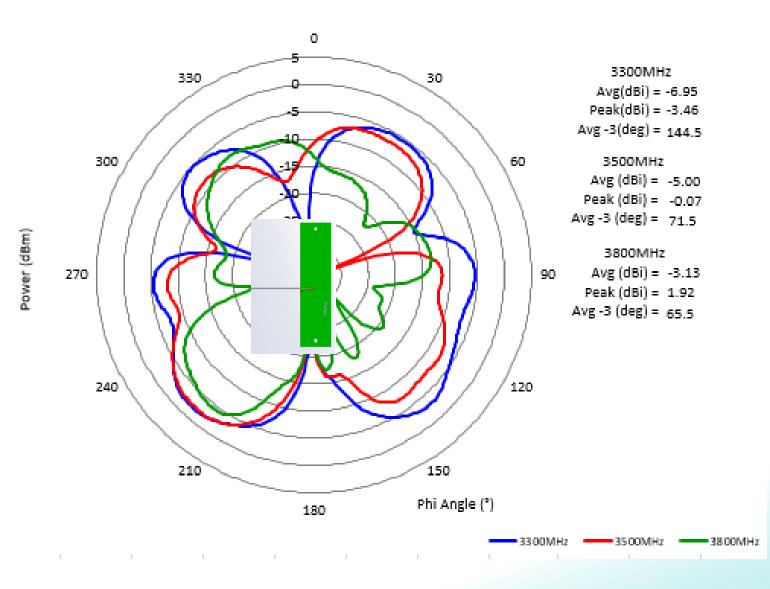
Series: Internal PCB Antenna

Description: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz PART NUMBER: W3554XXXXX

## CHARTS

## Free Space Radiation Pattern

# **Elevation Plane**



#### Issue: 1835

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

CONFIDENTIAL AND PROPRIETARY INFORMATION





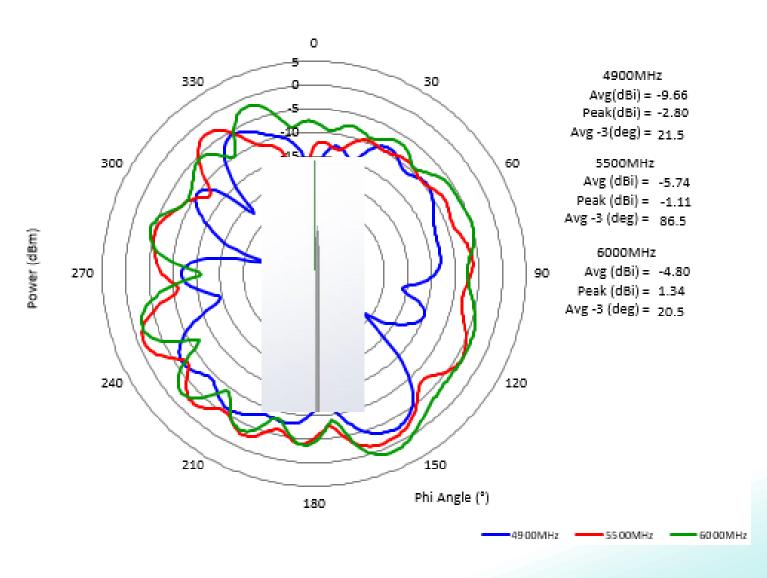
Series: Internal PCB Antenna

PART NUMBER: W3554XXXXX

## CHARTS

## Free Space Radiation Pattern

# Horizontal Plane



### Issue: 1835

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

ROHS 18



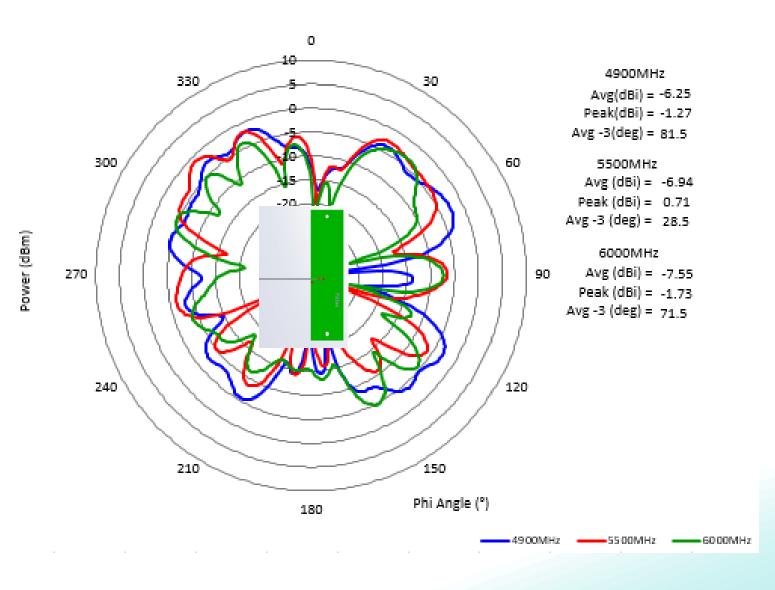
Series: Internal PCB Antenna

Description: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz PART NUMBER: W3554XXXXX

### CHARTS

## Free Space Radiation Pattern

## **Elevation Plane**



#### Issue: 1835

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

ROHS 19



Series: Internal PCB Antenna

Description: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz PART NUMBER: W3554XXXXX

## PACKAGING

5PCS/PE bag 20PCS PE bag/Foam bag 10PCS foam bag/Carton box Total: 1000PCS/Carton box



Issue: 1835

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





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный) **Факс:** 8 (812) 320-02-42 **Электронная почта:** <u>org@eplast1.ru</u> **Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.