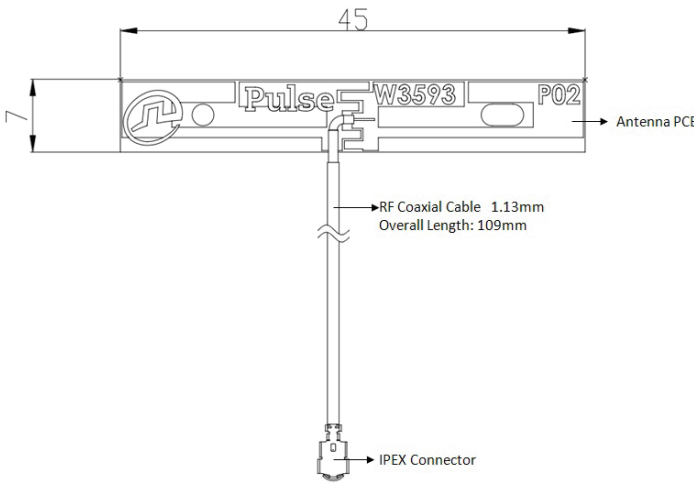
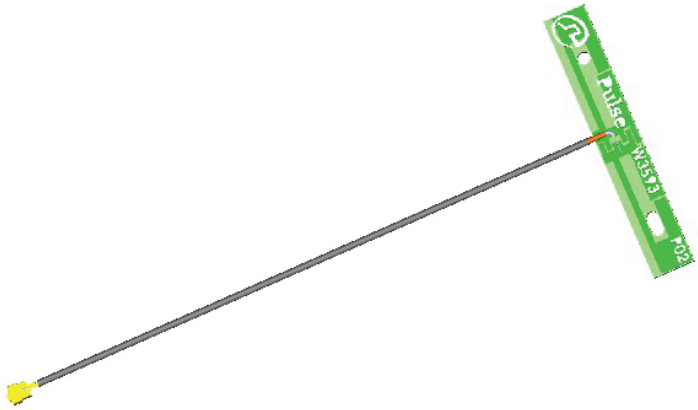
Internal Single-Band Dipole Antenna 4.9-5.85 GHz

Pulse Part Number W3593B0100





The W3593B antennas are internal PCB Single Band dipoles that cover the entire 4.9 – 5.85 GHz band. The W3593B0100 has a 100MM cable assembly with a standard IPEX connector for ease of connection on the board. With efficiency over 50% and a gain of 2dbi, the W3593 antennas are perfect internal options for WiFi applications. The wideband coverage is an ideal solution for industrial applications and data transmission and communication especially in IoT devices. The W3593B0100 is also an excellent internal solution for many applications in the Public Safety market.

Features

- Size WxLxH (7 x 45 x .8mm)
- For WiFi devices using 4.9 – 5.8 GHz and other applications in 4.9 – 5.8 GHz band
- Omnidirectional radiation pattern provides broad 360° coverage
- 10 inches cable length
- Various cable length from 3.9 to 10 inch also available
- RoHS Compliant

Applications

- WiFi in the 4.9 – 5.85 GHz band
- Data Transmission in IoT devices
- Industrial Applications
- Public Safety

Part Number	Cable Type	Cable Length (Inches/Meters)	Connector Type & Gender
W3593B0100	RF Coaxial 1.13mm	10/109mm	IPEX

Confidential and Proprietary — Pulse Electronics — All Rights Reserved — 2015
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.

San Diego, California
858 674 8100

Vancouver, Washington
360 944 7551

Europe
49 7032 7806 0

China
86 512 6807 9998

Internal Single-Band Dipole Antenna 4.9-5.85 GHz

Pulse Part Number W3593B0100

Electrical Specifications

Frequency	Freq 1	4.9-5.85 GHz
Nominal Impedance [Ω]		50
Efficiency (Typical) Freq.		50%
VSWR	Freq 1	2:1 Max
Peak Gain Frequency		2 dBi
RL		-10 dB Min

Environmental Specifications

Operating Temperature	-40/ +85 C°

Mechanical Specifications

Antenna PCB	Base Material: Single side FR4
Coaxial Cable (In/MM)	10/1.13mm RF Coaxial Cable with IPEX Connector
Weight (lbs/grams)	0.84 g
Thickness of PCB	0.8 mm
Overall Length of PCB	45 x 7 mm
Overall Length of Cable	109 mm
Mounting	Internal

San Diego, California
858 674 8100

Vancouver, Washington
360 944 7551

Europe
49 7032 7806 0

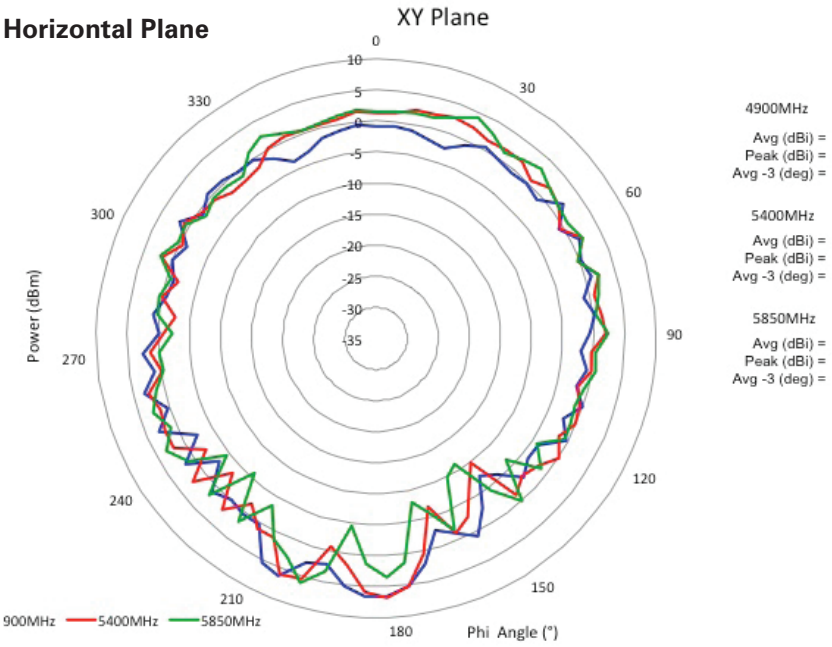
China
86 512 6807 9998

Internal Single-Band Dipole Antenna 4.9-5.85 GHz

Pulse Part Number W3593B0100

Typical Radiation Patterns

Horizontal Plane

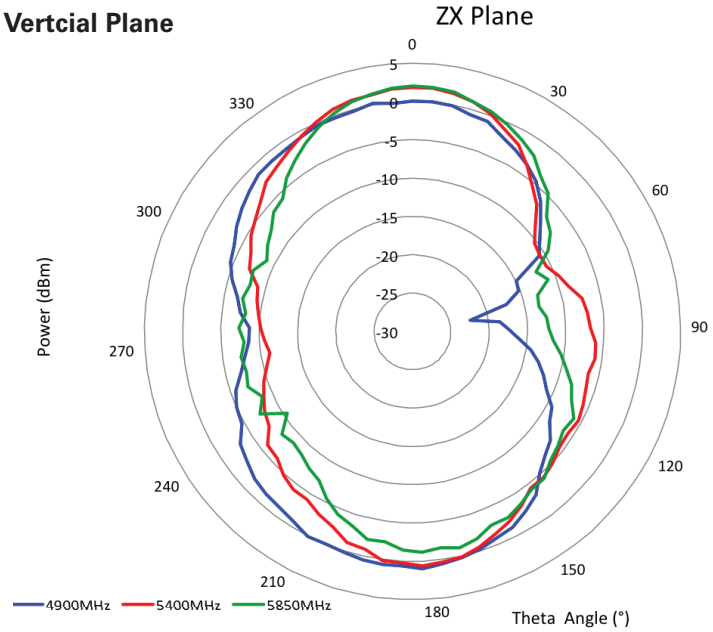


4900MHz
Avg (dBi) =
Peak (dBi) =
Avg -3 (deg) =

5400MHz
Avg (dBi) =
Peak (dBi) =
Avg -3 (deg) =

5850MHz
Avg (dBi) =
Peak (dBi) =
Avg -3 (deg) =

Vertcial Plane



4900MHz
Avg (dBi) =
Peak (dBi) =
Avg -3 (deg) =

5400MHz
Avg (dBi) =
Peak (dBi) =
Avg -3 (deg) =

5850MHz
Avg (dBi) =
Peak (dBi) =
Avg -3 (deg) =

Pulse Worldwide Headquarters
12220 World Trade Drive
San Diego, CA 92128
U.S.A.

Tel: 858 674 8100
Fax: 858 674 8262

Larsen Brand Antennas
3611 NE 112th Avenue
Vancouver, WA 98682
USA

Tel: 360 944 7551
Fax: 369 944 7556

Europe Headquarters
Pulse GmbH & Do, KG
Zeppelinstrasse 15
Herrenberg, Germany

Tel: 49 7032 7806 0
Fax: 49 7032 7806 135

Pulse (Suzhou) Wireless Products Co, Inc.
99 Huo Ju Road, (#29 Bldg, 4th Phase)
Suzhou New District
Science & Tech Industrial Park
Jiangsu Province, Suzhou 215009 PR China

Tel: 86 512 6807 9998
Fax: 86 512 6809 8023

Pulse Electronics / LARSEN ANTENNAS

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2015. Pulse Electronics, Inc. All rights reserved.