

DATA SHEET

WIRELESS COMPONENTS

PCB type antenna
ANTX150P118B09153

890~925MHz



FEATURES & BENEFITS

- The smallest PCB antenna in the market
- Miniature design allows users to save required space
- Double-side adhesive tape makes it easy to install in device
- Ranges of types of connector and cable provide a flexible design options
- Halogen free and RoHS compliant

APPLICATIONS

- Tablet / Desktop PC
- Internet TV / STB / Game console / Camera
- WiFi network devices (IEEE 802.11b/g/n)
- Bluetooth / ZigBee devices
- Car Infotainment
- Smart meter
- Lighting control
- POS terminal
- Wireless Industrial Control

ORDERING INFORMATION-GLOBAL PART NUMBER, PHYCOMP CTC & 12NC

All part numbers are identified by the series, packing type, material, size, antenna type, working frequency and packing quantity.

YAGEO BRAND ordering code

GLOBAL PART NUMBER (PREFERRED)

ANT X150 P 118 B 0915 3
(1) (2) (3) (4) (5) (6) (7)

(1) FAMILY

ANT = Antenna products

(2) CONNECTOR & CABLE LENGTH (MM)

X = I-PEX
 150 = 150mm

(3) ANTENNA TYPE

P=PCB

(4) SERIAL NUMBER

118 = SERIAL NUMBER 118

(5) PACKAGE TYPE

B = Bulk

(6) WORKING FREQUENCY

915 = 890~925MHz

(7) CABLE TYPE

3 = 1.13mm diameter Mini-Coaxial Cable

SPECIFICATIONS

Table 1

| DESCRIPTION | VALUE |
|---------------------------------|------------------------|
| Working Frequency | 890~925MHz |
| VSWR | 2.5:1 max |
| Peak Gain | 1.9dBi |
| Polarization | Linear |
| Radiation Pattern | Omni-directional |
| Impedance | 50 Ω Nominal |
| Operating Temperature | -40 °C to 85 °C |
| Maximum Power | 1 W |
| Dimension | 34mm x 7mm x 0.95mm |
| Radio Connector | I-PEX (20278-112R-13) |
| Cable Diameter / Length / Color | 1.13mm / 150mm / Black |
| Mounting | Adhesive Tape (HF-DS) |

DIMENSIONS

Table 2 Mechanical

| DIMENSION | VALUE |
|-----------|------------|
| L (mm) | 150+-3.00 |
| W (mm) | 34+-0.30 |
| H (mm) | 7+-0.30 |
| T (mm) | 0.95+-0.15 |
| A (mm) | 2.30 Max |

OUTLINES

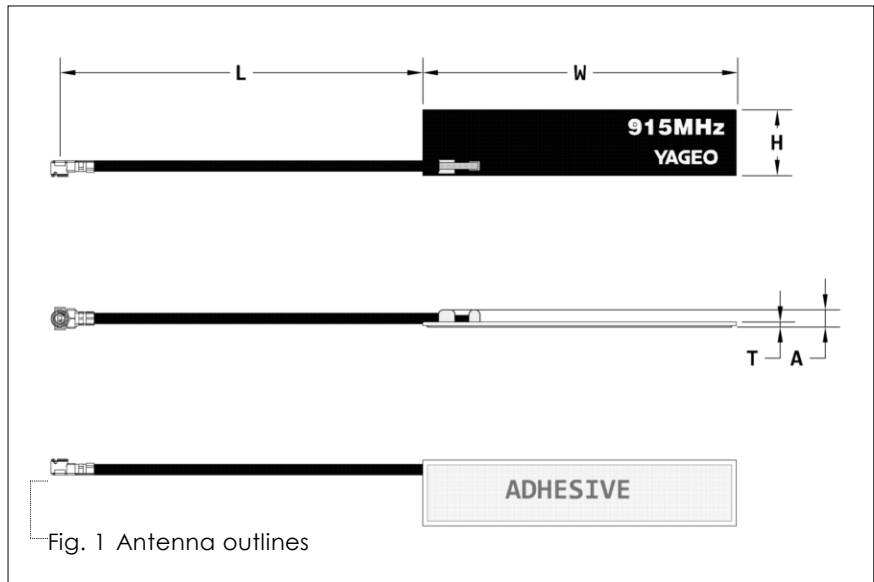
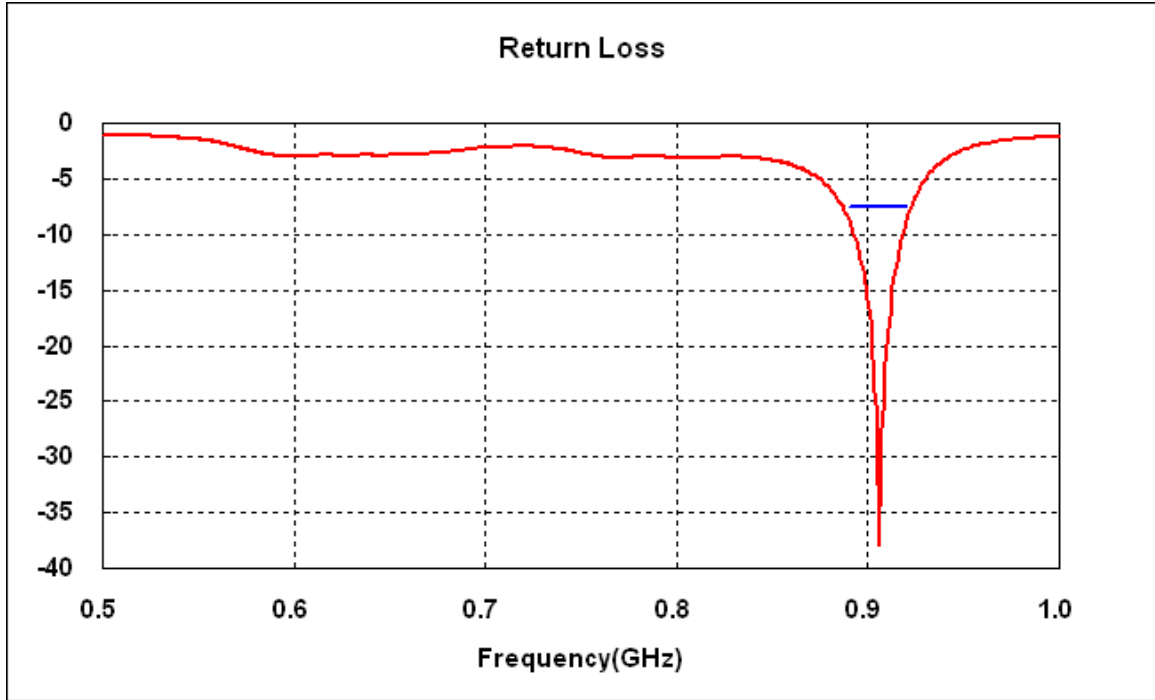


Fig. 1 Antenna outlines

RETURN LOSS & VSWR

Return Loss (dB)



VSWR

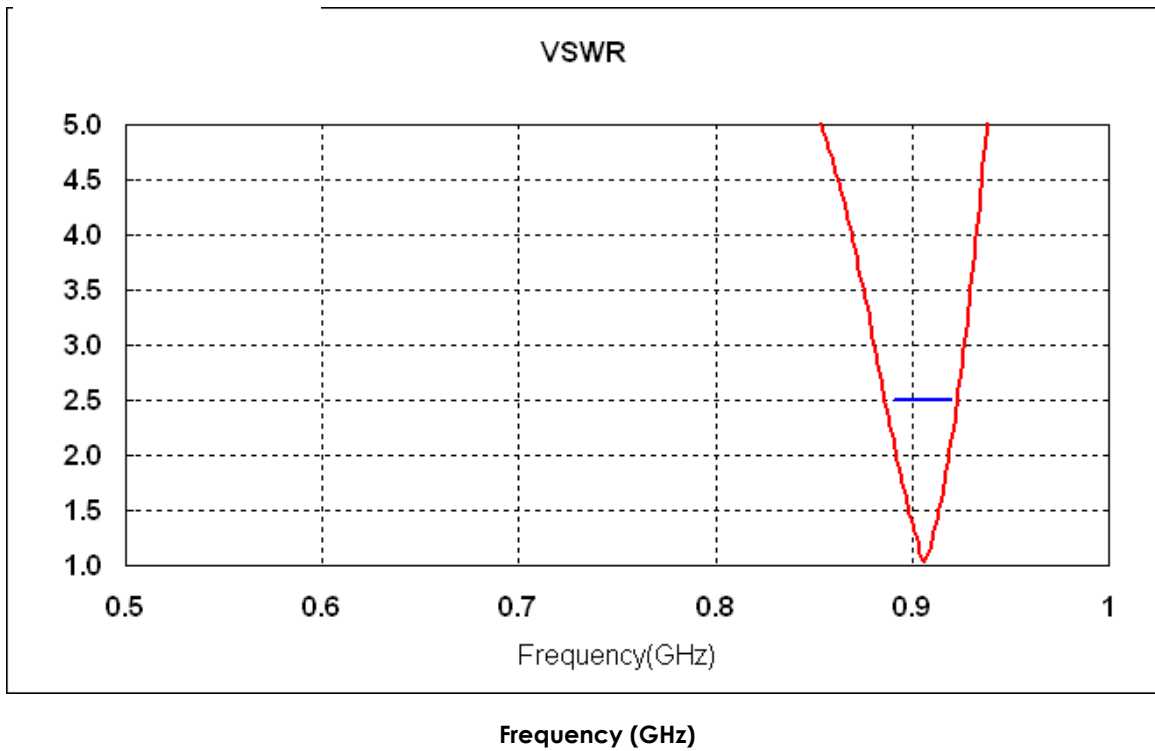


Fig. 2 Return loss & VSWR Measurement

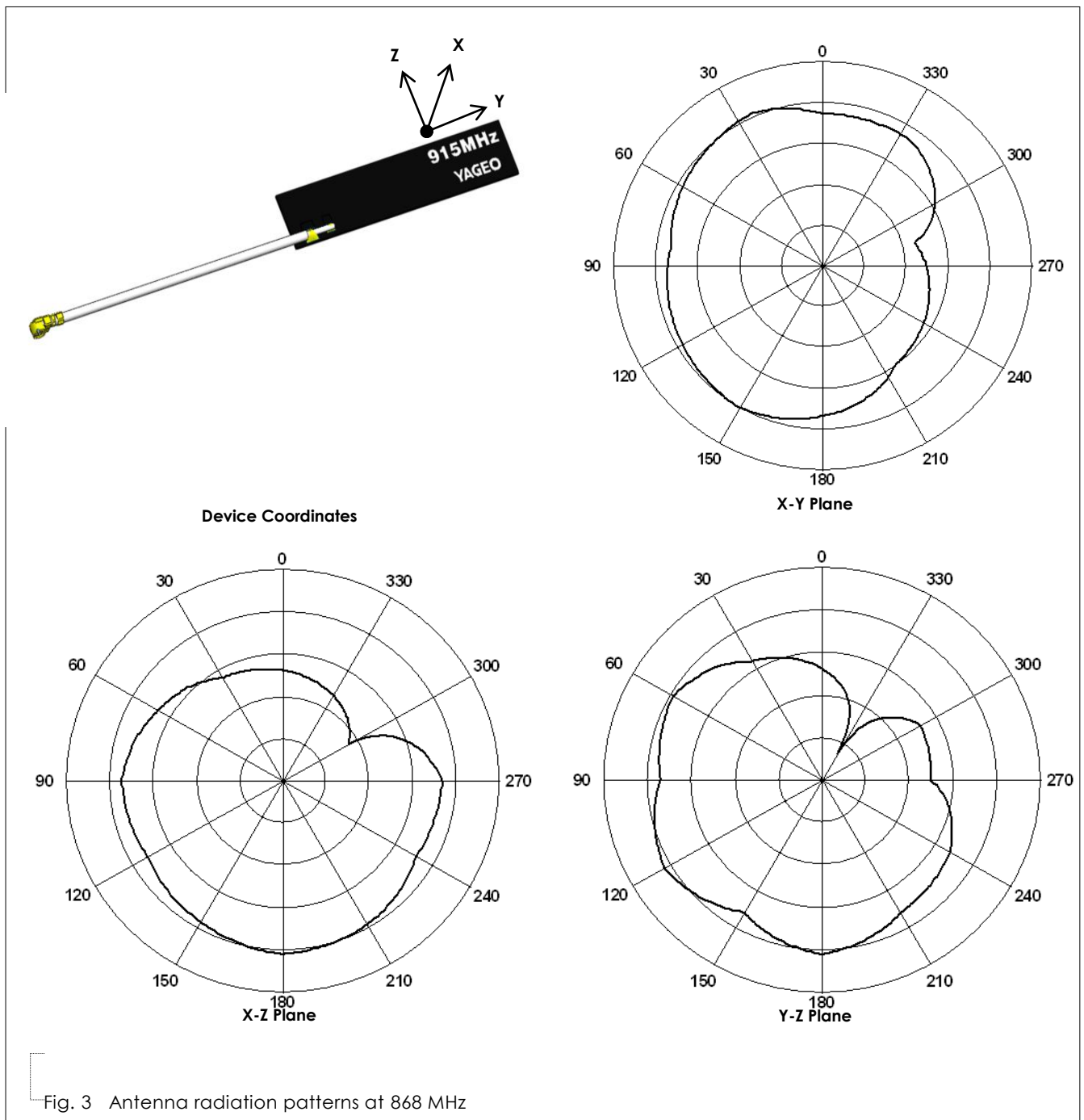
ANTENNA GAIN & EFFICIENCY

Table 3

| FREQUENCY (GHz) | AVERAGE GAIN (dBi) | EFFICIENCY (%) | PEAK GAIN (dBi) |
|-----------------|--------------------|----------------|-----------------|
| 890 | -3.1 | 49.1 | 1.6 |
| 894 | -2.8 | 52.1 | 1.7 |
| 900 | -2.5 | 56.7 | 1.9 |
| 915 | -2.6 | 55.0 | 1.5 |
| 925 | -3.2 | 48.3 | 0.6 |

ANTENNA RADIATION PATTERNS

Scale: 5 dBi / div Max : 5 dBi Min : -20 dBi



REVISION HISTORY

| REVISION | DATE | CHANGE NOTIFICATION | DESCRIPTION |
|-----------------|---------------|----------------------------|---|
| Version 0 | Jan. 15, 2018 | - | - New data sheet for PCB type antenna, 890~925MHz application |

Mouser Electronics

Authorized Distributor

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

[Pulse:](#)

[ANTX150P118B09153](#)