

DATA SHEET

WIRELESS COMPONENTS

PCB type antenna
ANTX100P1 13B24003
2.40 ~ 2.50GHz



FEATURES & BENEFITS

- 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

ORDERING INFORMATION - GLOBAL PART NUMBER, PHYCOMP CTC & I2NC

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 X100 P 113 B 2400 3
 (1) (2) (3) (4) (5) (6) (7)

(1) FAMILY

ANT = Antenna products

(2) CONNECTOR & CABLE LENGTH (MM)

X = I-PEX
 100 = 100mm

(3) ANTENNA TYPE

P=PCB

(4) SERIAL NUMBER

113 = SERIAL NUMBER 113

(5) PACKAGE TYPE

B = Bulk

(6) WORKING FREQUENCY

2400 = 2.40 ~ 2.50 GHz

(7) CABLE TYPE

3 = 1.13mm diameter Mini-Coaxial Cable

SPECIFICATIONS

Table 1

DESCRIPTION	VALUE
Working Frequency	2.40 ~ 2.50 GHz
VSWR	2.5:1 max
Peak Gain	2.8 dBi
Polarization	Linear
Radiation Pattern	Omni-directional
Impedance	50 Ω Nominal
Operating Temperature	-40 °C to 85 °C
Maximum Power	1 W
Dimension	30mm x 5mm x 0.55mm
Radio Connector	I-PEX (20278-112R-13)
Cable Diameter / Length / Color	1.13mm / 100mm / Black
Mounting	Adhesive Tape (HF-DS)

DIMENSIONS

Table 2 Mechanical Dimension

DIMENSION	VALUE
L (mm)	100 ±3.00
W (mm)	30 ± 0.30
H (mm)	5 ± 0.30
T (mm)	0.55 ± 0.15
A (mm)	2.30 Max

OUTLINES

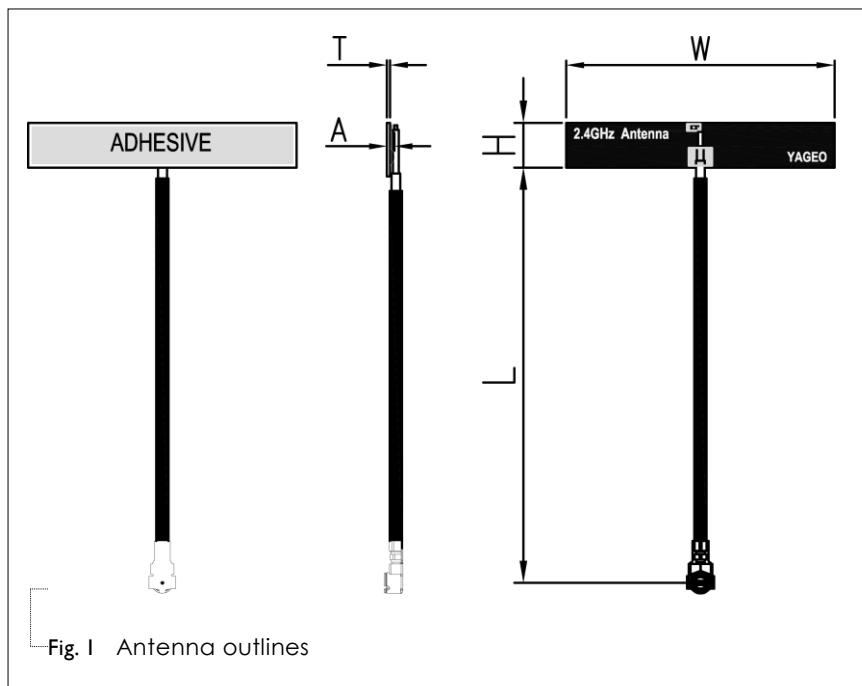
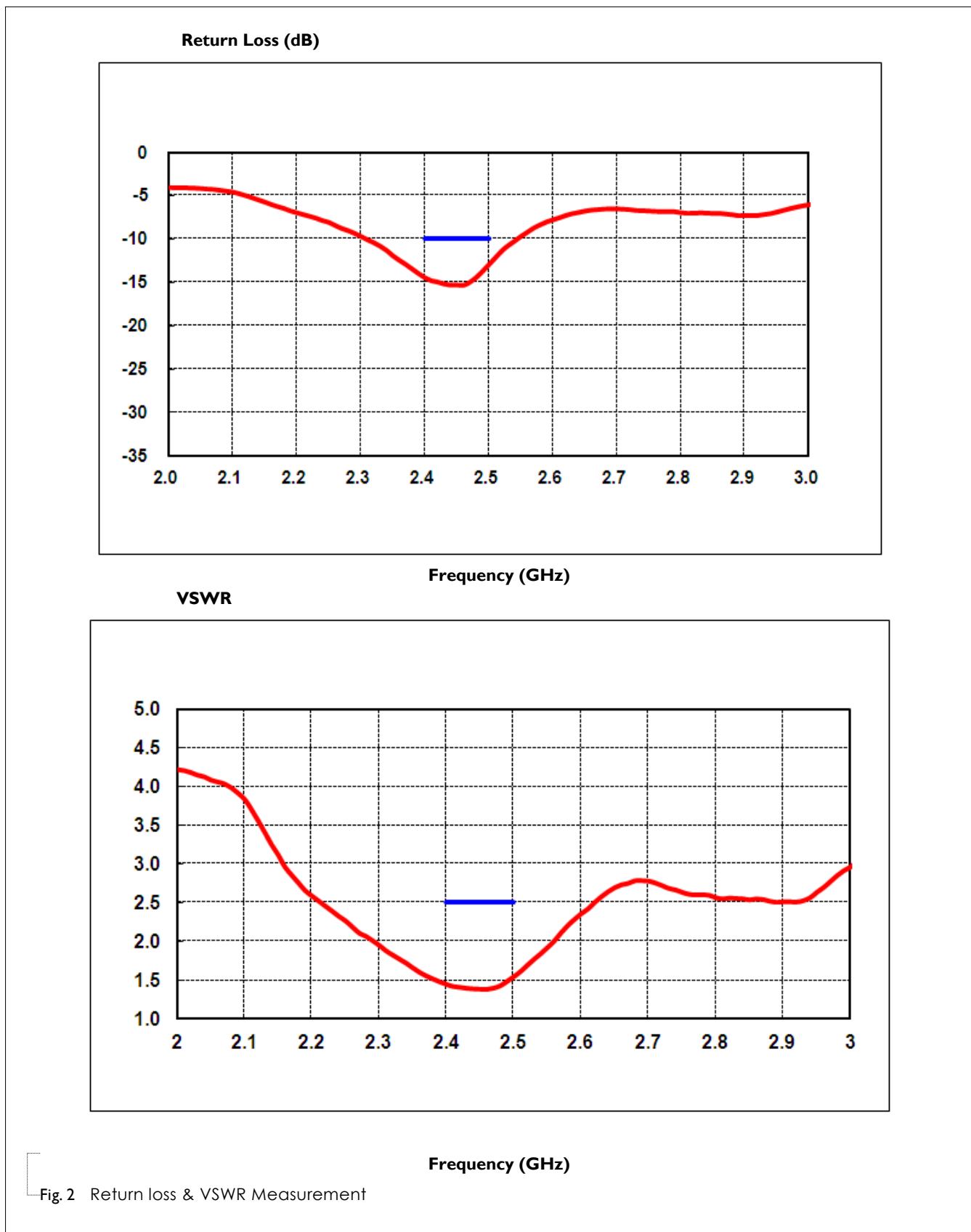


Fig. 1 Antenna outlines

RETURN LOSS & VSWR



ANTENNA GAIN & EFFICIENCY

Table 3

FREQUENCY (GHz)	AVERAGE GAIN (dBi)	EFFICIENCY (%)	PEAK GAIN (dBi)
2.40	-1.5	70.7	2.4
2.45	-1.4	72.3	2.8
2.50	-1.6	70.0	2.5

ANTENNA RADIATION PATTERNS

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

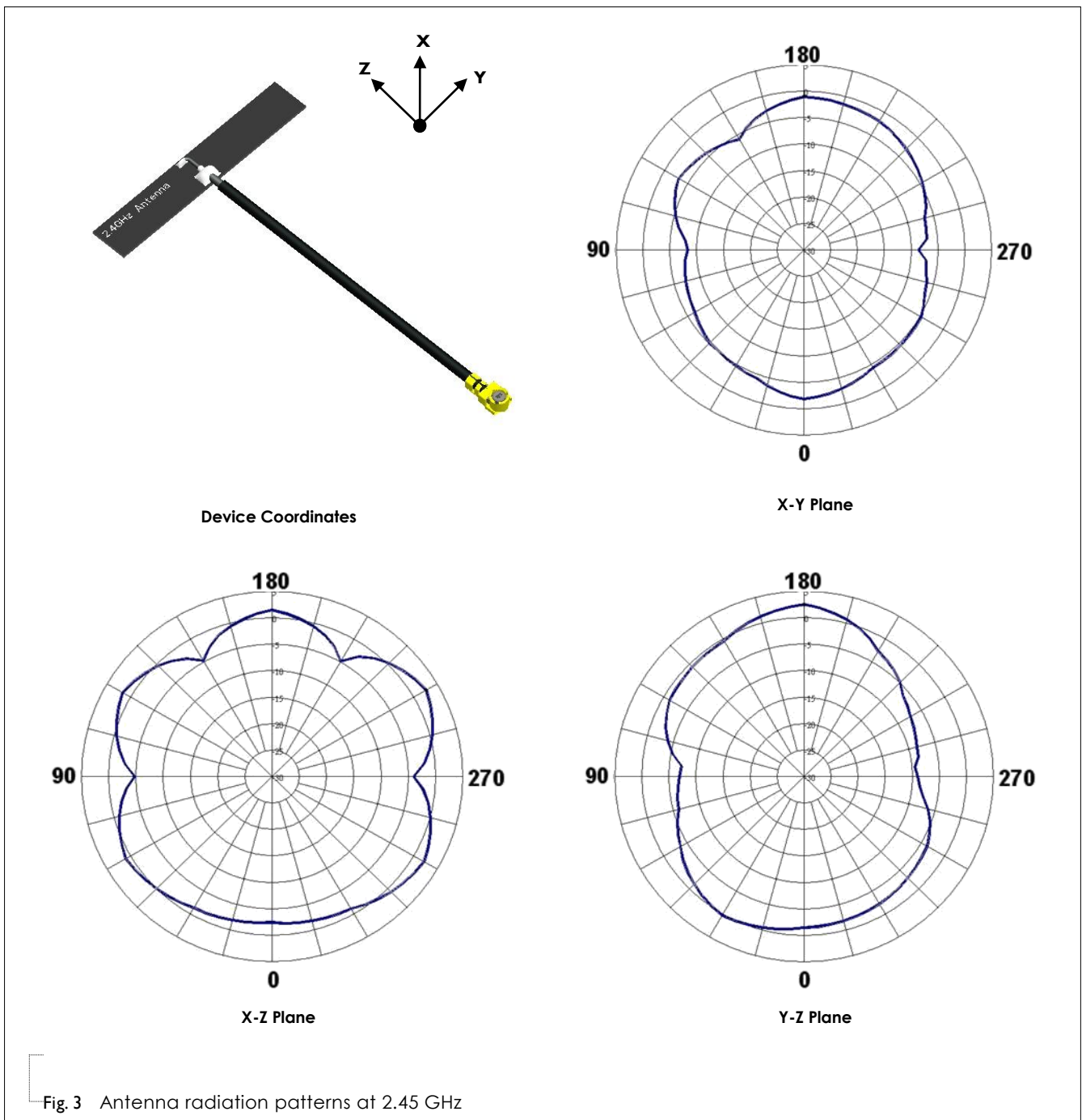


Fig. 3 Antenna radiation patterns at 2.45 GHz

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Apr. 20, 2016	-	- Data sheet for PCB type antenna, 2.40 ~ 2.50GHz