

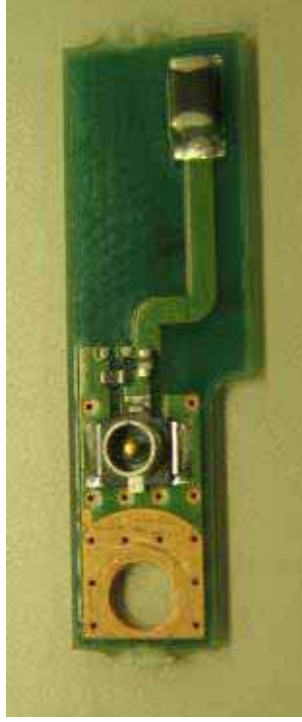
# Bluetooth Antenna Specification

2007.6.4  
FUJITSU Limited

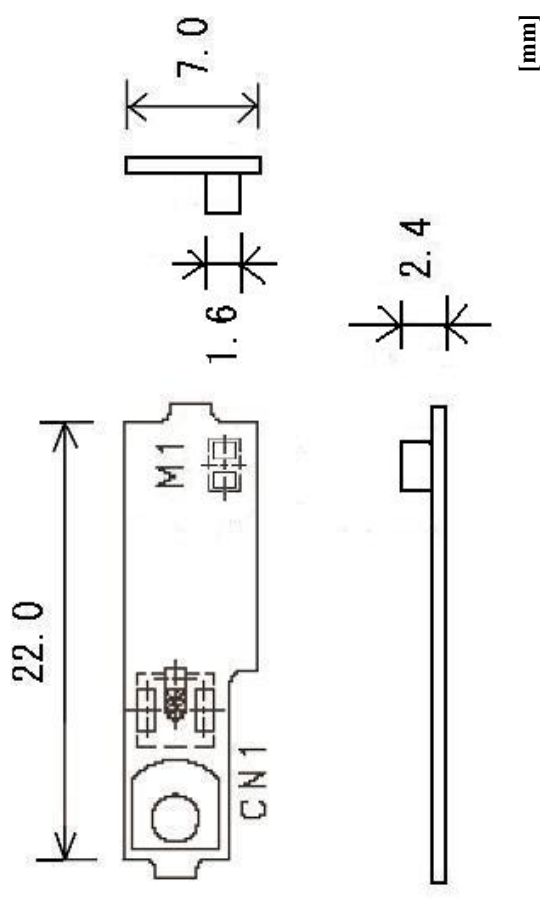
■ Model: CP331591

■ Antenna Type: Monopole

■ Appearance:



■ Dimention:



■ Features:

Impedance 50Ω  
Frequency Band 2400~2500MHz

■ MAX Gain: -3.0 dBi

■ VSWR: 1.23

[mm]

## Measurement data of antenna

20070410M0270\_p01o

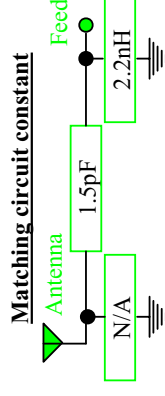
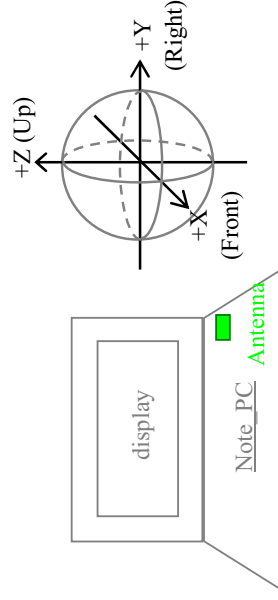
10.Apr.2007

Measured in Satimo Stargate system at TAIYO YUDEN R&D CENTER.

Antenna sample: AF\_216M245001

Antenna size: 2.5 x 1.6 x 1.6 [mm]

### Appearance and coordinates definition

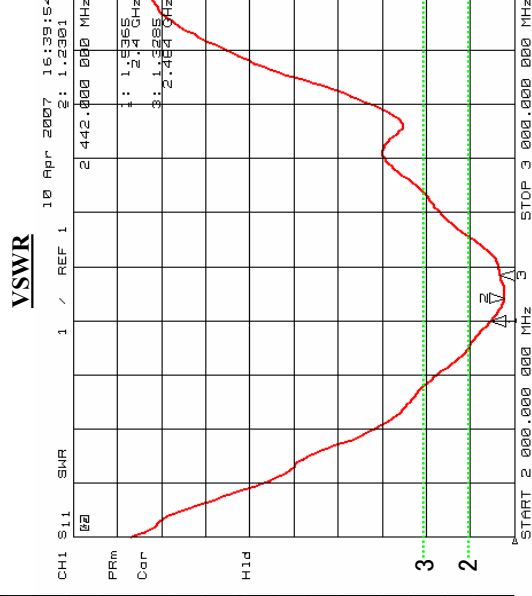


N/A :-

1.5pF : EVK105CHIR5BW

2.2nH : HK10052N2S

Frequency [MHz]	@2400	@2442	@2484
<b>Peak gain</b>			
XY-plane			
TX-H	-3.4	-3.0	-3.5
TX-V	-8.2	-10.4	-11.8
Max(H,V)	-3.4	-3.0	-3.5
YZ-plane			
TX-H	-6.4	-7.2	-7.1
TX-V	-11.7	-12.5	-12.4
Max(H,V)	-6.4	-7.2	-7.1
ZX-plane			
TX-H	-8.5	-8.2	-8.5
TX-V	-7.4	-7.1	-7.2
Max(H,V)	-7.4	-7.1	-7.2
Total			
TX-H	-3.4	-3.0	-3.5
TX-V	-7.4	-7.1	-7.2
Max(H,V)	-3.4	-3.0	-3.5
<b>Average gain</b>			
XY-plane			
TX-H	-10.3	-10.0	-10.1
TX-V	-14.1	-15.1	-15.3
Max(H,V)	-9.5	-9.7	-9.8
YZ-plane			
TX-H	-12.3	-13.4	-12.8
TX-V	-15.5	-16.4	-16.4
Max(H,V)	-11.9	-12.9	-12.4
ZX-plane			
TX-H	-14.7	-14.8	-14.5
TX-V	-12.5	-12.0	-11.5
Max(H,V)	-11.2	-11.2	-10.8
Total			
TX-H	-12.1	-12.2	-12.1
TX-V	-13.8	-14.1	-13.8
Max(H,V)	-10.8	-11.1	-10.9
<b>Efficiency [dB]</b>			
	-9.0	-9.3	-9.1



\*Note: Total peak gain=Peak(XY[H],XY[V],YZ[H])YZ[V],ZX[H])ZX[V]

\*Note:The value is average value in 1 round of each inclination direction angle.

\*Note: Total average gain=Average(XY[Max(H,V)],YZ[Max(H,V)],ZX[Max(H,V)])

**TAIYO YUDEN  
CONFIDENTIAL**

**Radiation Pattern**

