

# Antenna Specification for CS15

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**FCC-ID: *RFD-CS-BG***

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# Antenna for PAN1310 Bluetooth Module

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**FCC-ID: *Q23-31308***

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# "High Frequency Ceramic Solutions"

## 2450 MHz Antenna

P/N 2450AT18B100

Detail Specification: 06/12/06

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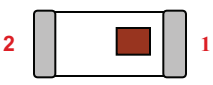
### General Specifications

Part Number	2450AT18B100
Frequency Range	2400 - 2500 Mhz
Peak Gain	0.5 dBi typ. (XZ-V)
Average Gain	-0.5 dBi typ. (XZ-V)
Return Loss	9.5 dB min.

Input Power	3W max.
Impedance	50 Ω
Operating Temperature	-40 to +85°C
Reel Quantity	3,000

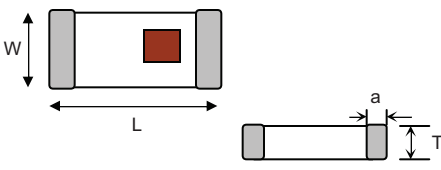
P/N	Packaging Style	Bulk	Suffix = S	Eg. 2450AT18B100S
		T & R	Suffix = E	Eg. 2450AT18B100E
Suffix	Termination Style	100% Tin	Suffix = None	Eg. 2450AT18B100(E or S)
		Tin / Lead	Please consult Factory	

Terminal Configuration	
No.	Function
1	Feeding Point
2	NC



### Mechanical Dimensions

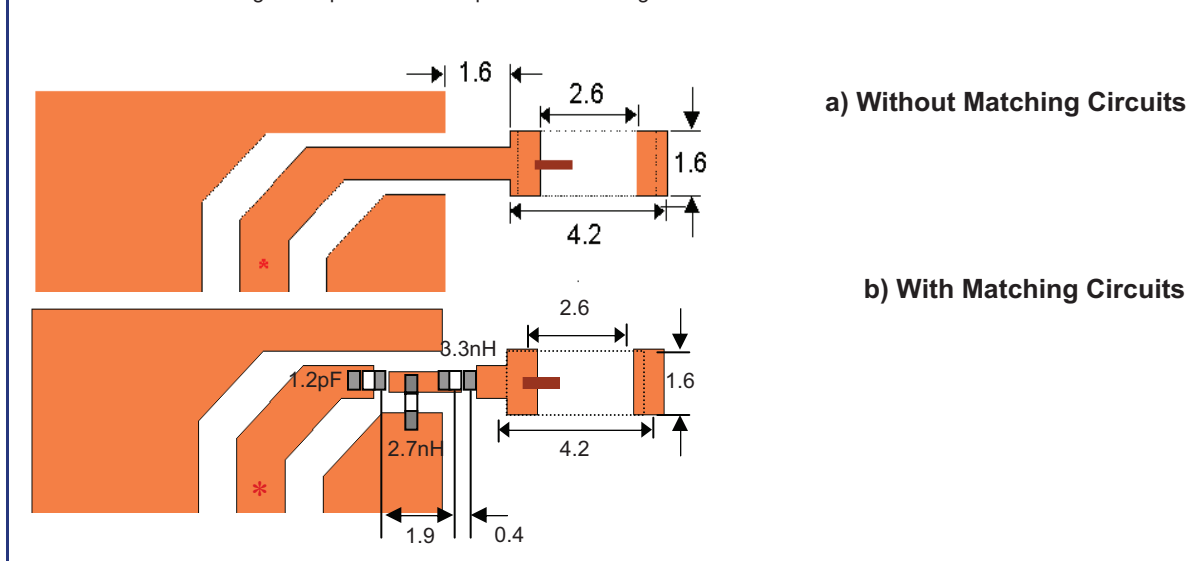
	In	mm
L	0.126 ± 0.008	3.20 ± 0.20
W	0.063 ± 0.008	1.60 ± 0.20
T	0.051 +.004/-.008	1.30 +0.1/-0.2
a	0.020 ± 0.012	0.50 ± 0.30



### Mounting Considerations

Mount these devices with brown mark facing up. Units: mm

Line width should be designed to provide 50Ω impedance matching characteristics.



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# "High Frequency Ceramic Solutions"

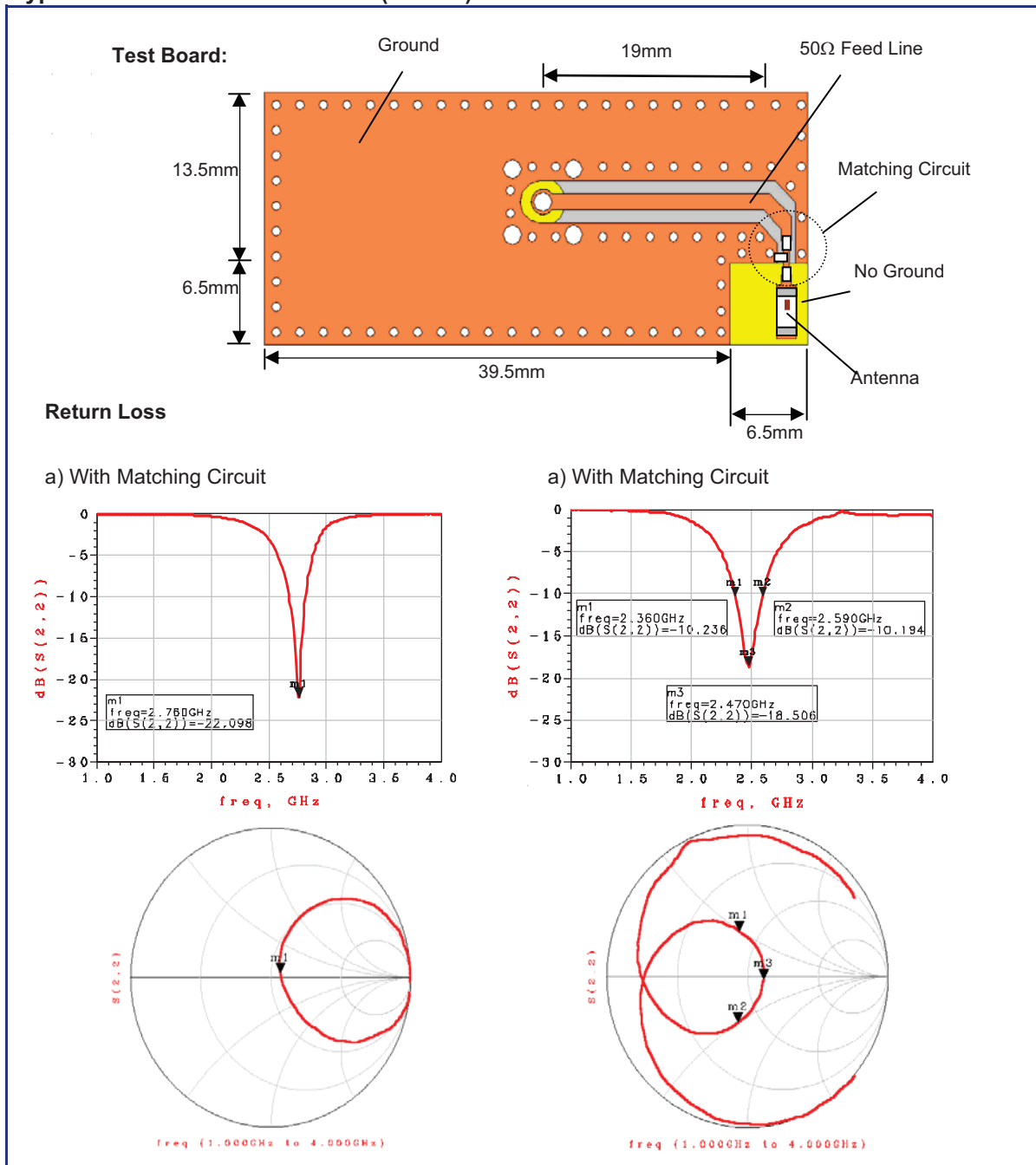
**2450 MHz Antenna**

**P/N 2450AT18B100**

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## Typical Electrical Characteristics (T=25°C)



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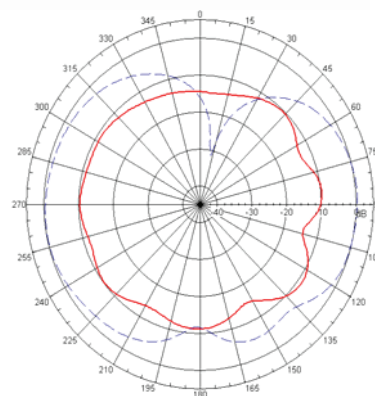
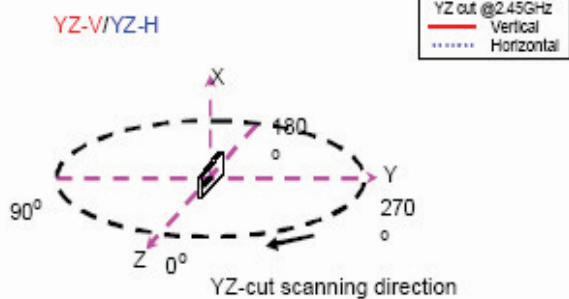
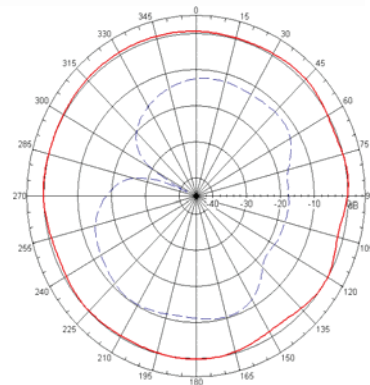
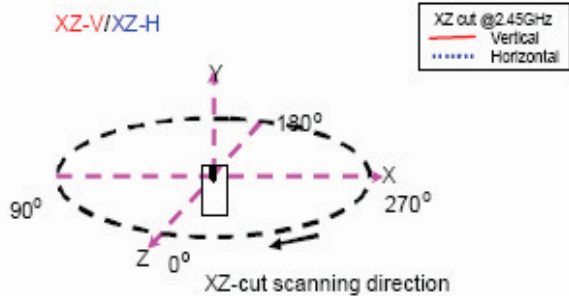
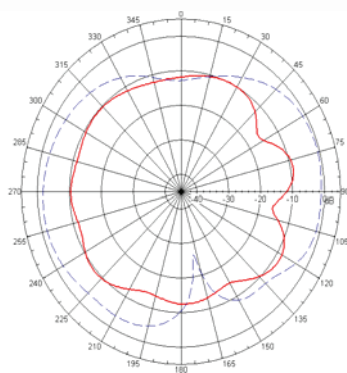
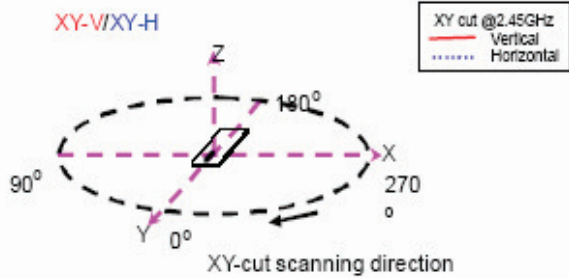
2450 MHz Antenna

P/N 2450AT18B100

Detail Specification: 06/12/06

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## Typical Radiation Patterns



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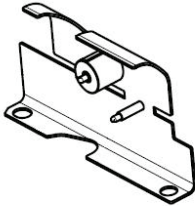
# Antenna for UC864-G Module

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**FCC-ID: *RI7UC864G***

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## GSM / UMTS Quad Band Antenna

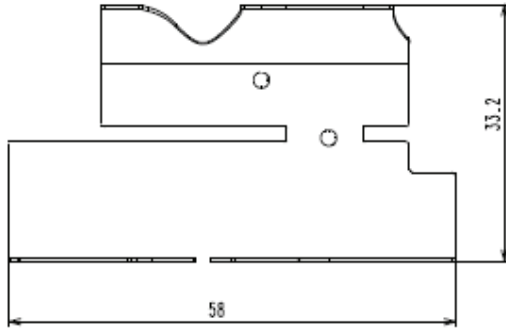


Part Nr. 766 808

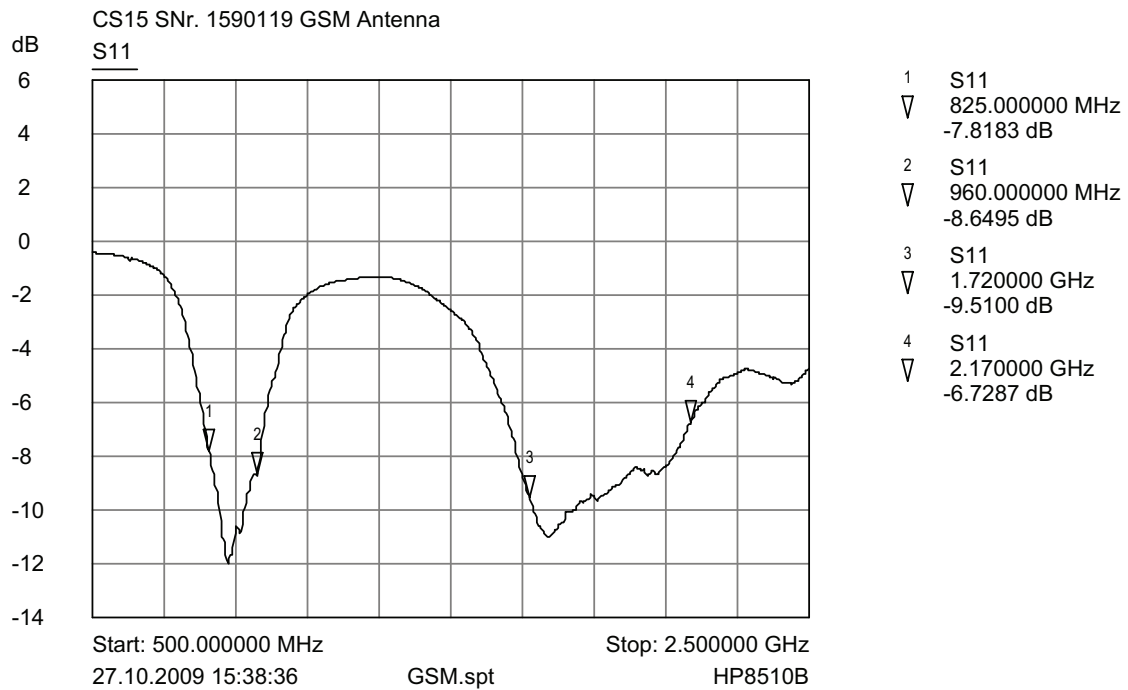
### Electrical Characteristics

Description	Value	Comment
Frequency Bands	824 - 960 MHz 1720 – 2170 MHz	@ 6 dB min. return loss @ 6 dB min. return loss
Return Loss		See Fig. 1
Impedance	50 ohm	
Gain total max. low band	2.0 dBi	See Table 1
Polarization low band		See Fig. 2
Antenna Characteristic	Omni directional	See Fig. 2
Gain total max. high band	1.0 dBi	See Table 2
Polarization high band		See Fig. 3
Antenna Characteristic	Omni directional	See Fig. 3
Power Dissipation	3 W max.	
Operation Temperature	- 40 °C to + 85 °C	
Surface	CuSn6 tin plated	ROHS compliant

## Dimensions [mm]



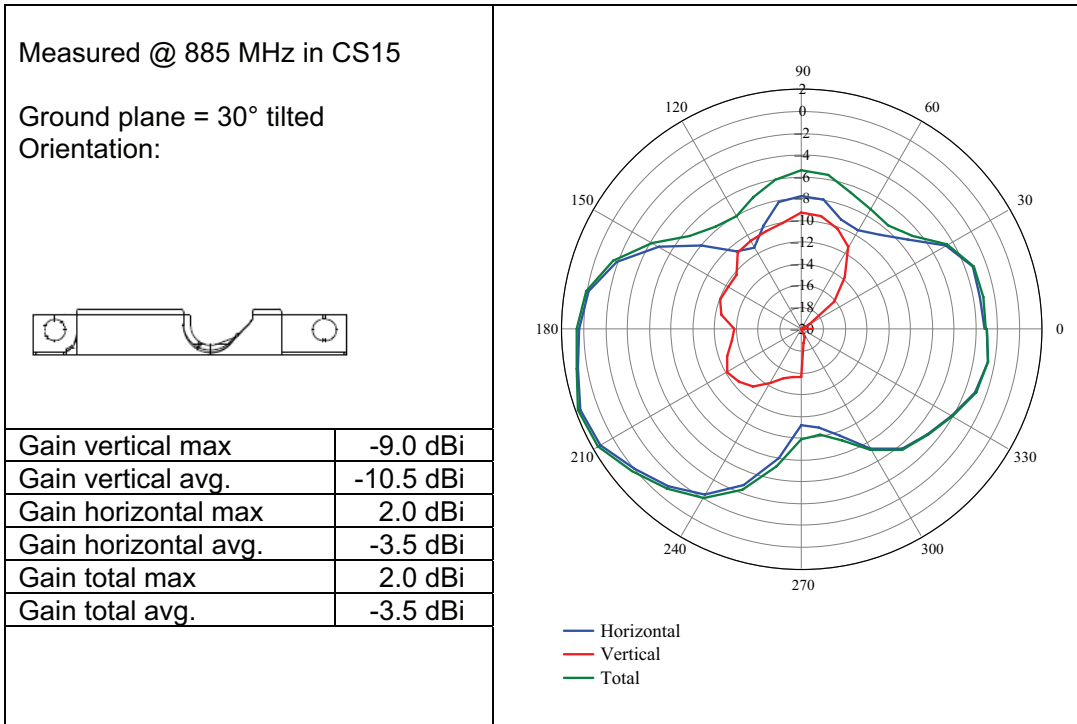
## Fig.1 Return Loss





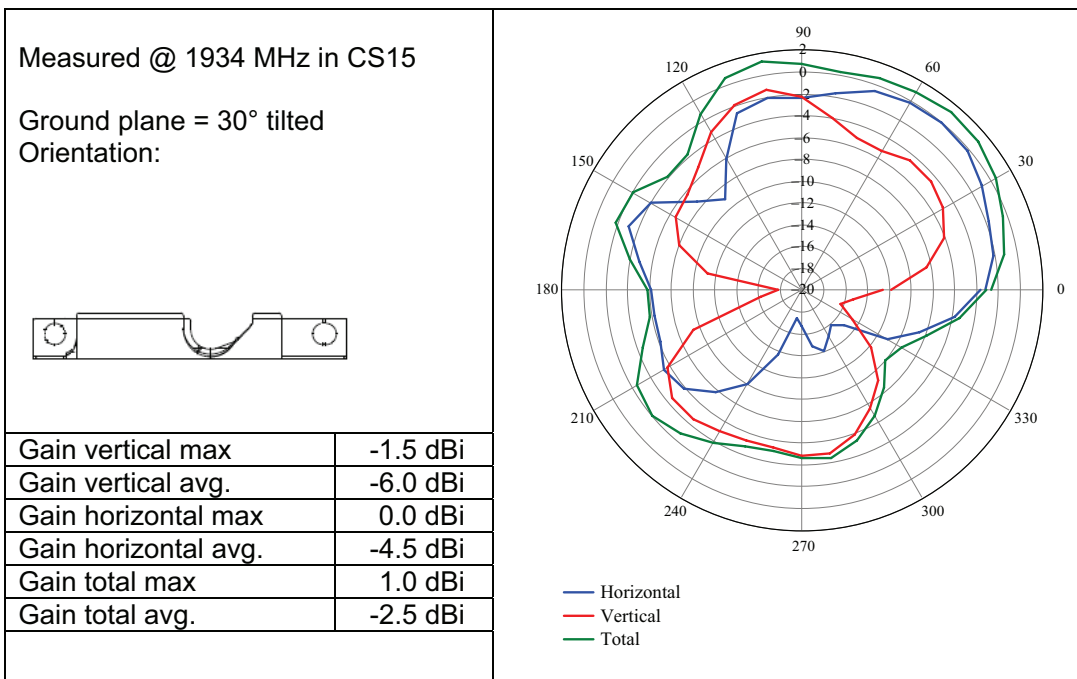
**Table 1 Gain @ 885 MHz**

**Fig. 2 Characteristic @ 885 MHz**



**Table 2 Gain @ 1934 MHz**

**Fig. 3 Characteristic @ 1934 MHz**



**Antenna for ConnectBlue  
OWLAN211b/g WLAN Module**

**FCC-ID: PVH-090901**

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## 3 Antenna Information

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There are 2 different antenna options available:

- An internal surface mounted (SMD) antenna.
- Two U.FL connectors for external antenna.  
Different types of external antennas are available.

See section 4.1 for more information on antenna placement.

This chapter gives a quality overview of the different antenna options.

### 3.1 Surface Mounted Antenna (internal)

The unit cannot be mounted in a metal-shielded enclosure with this antenna.

<b>Part Number</b>	<b>OWLAN211gi</b>
Antenna name	FR05-01-N
Manufacture	Fractus
Polarization	Linear
Gain (Typ)	1.1 dBi
Antenna Size (LxWxH)	6.7 x 6.7 x 1 mm
Comment	The antenna gain is dependent of the mounting of the module. See section 4.4 for mounting the module considering the antenna.

