



### Features

- Small and lightweight
- No tuning components
- Available in tape and reel or tray packing for automatic mounting

### Electrical

Frequency Range	2400 – 2500 MHz
Peak Gain <sup>(1)</sup>	0 dBi
VSWR <sup>(1)</sup>	less than 2.0:1
Polarization	linear
Azimuth Beamwidth	omnidirectional
Power Handling	10 Watt cw
Feed Point Impedance	50 Ohms unbalanced

Note (1) Figures dependent on ground plane size

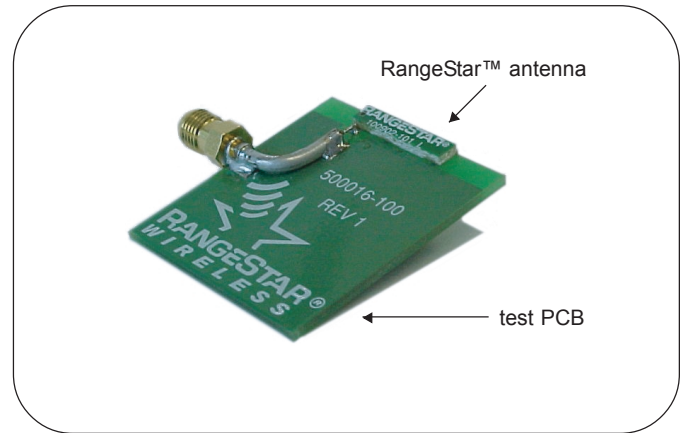
### Mechanical

Size	18.2 x 3.9 x 1.6 mm
Weight	less than 1 g
Mounting	surface mount technology

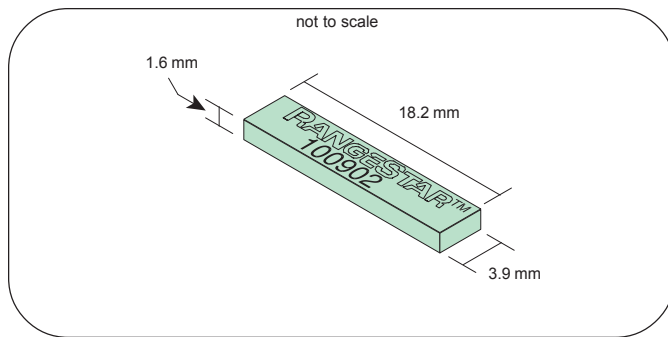
### Ultima™ Series Antennas

This small embedded antenna provides the most reliable, easy-to-use, and adjustment-free antenna technology for handling during assembly and implementation by developers.

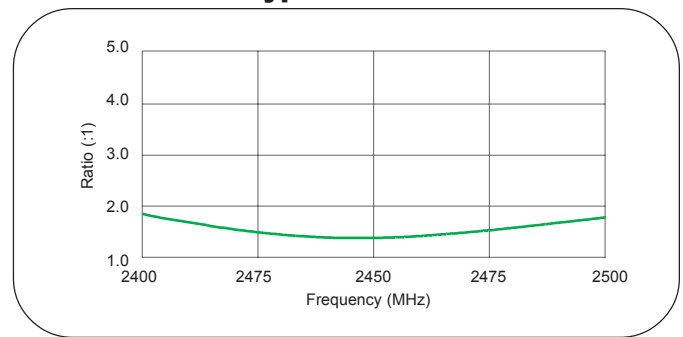
### Typical Mounting



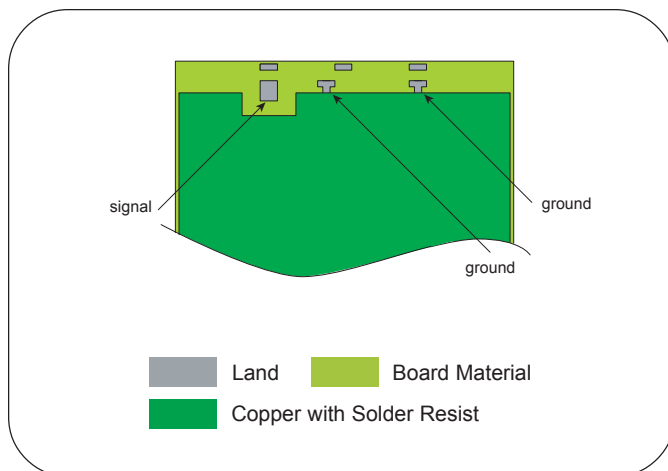
### Dimensions



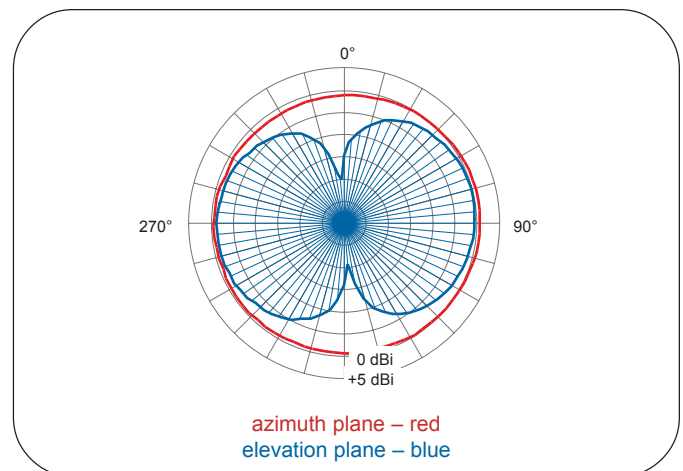
### Typical VSWR



### Typical Pad Layout



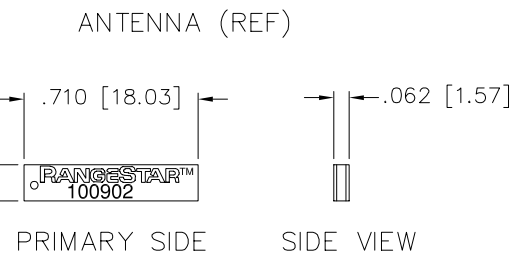
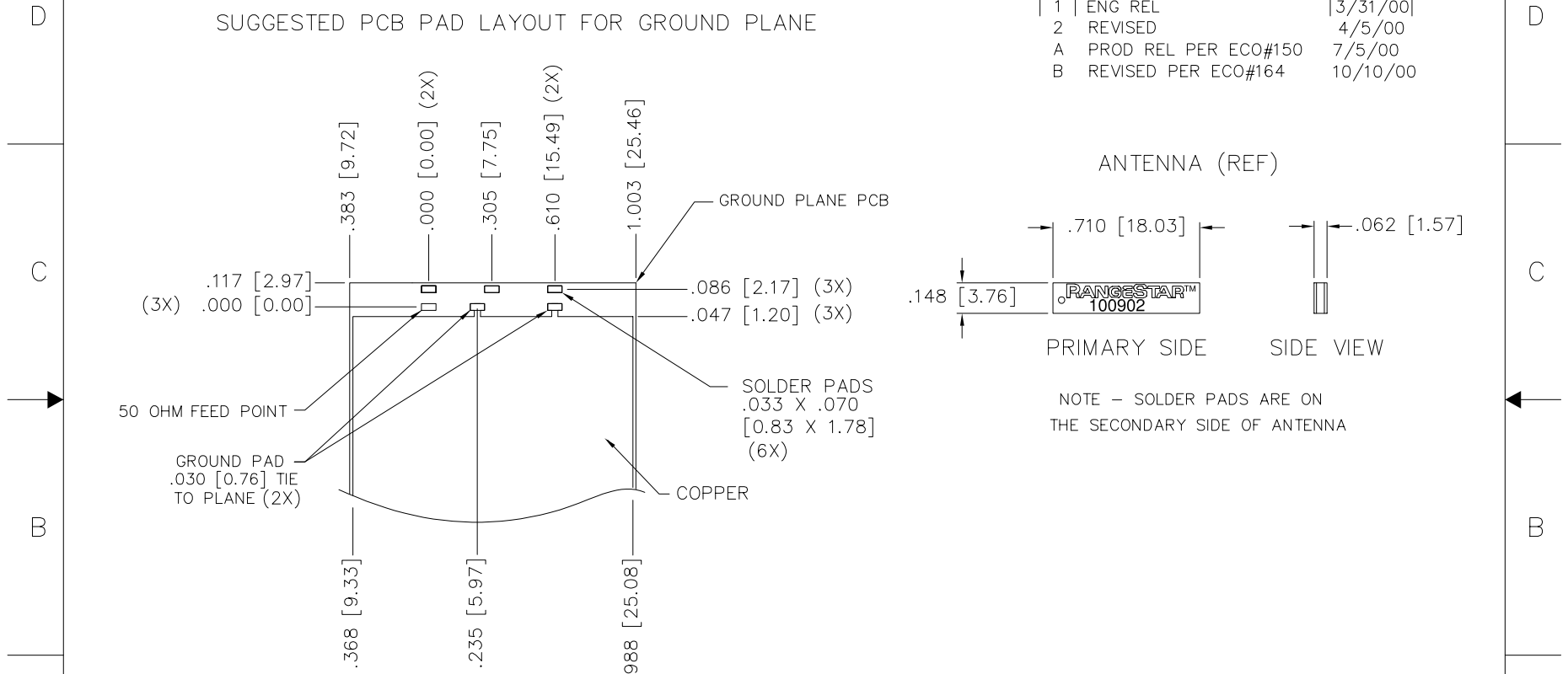
### Typical Pattern



4 3 2 1

SUGGESTED PCB PAD LAYOUT FOR GROUND PLANE

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ENG REL	3/31/00	
2	REVISED	4/5/00	
A	PROD REL PER ECO#150	7/5/00	
B	REVISED PER ECO#164	10/10/00	



NOTE - SOLDER PADS ARE ON THE SECONDARY SIDE OF ANTENNA

PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND IN MILLIMETERS		DO NOT SCALE DRAWING	
TOLERANCES ARE:		APPROVALS	DATE
INCHES .XX± .01	MILLIMETERS ± [.25]	DRAWN R JONEZ	6/19/00
.XXX± .005	± [.12]	CHECK	
ANGLES ± .5°		ENG	
MATERIAL	SEE NOTES	MKTNG	
FINISH	SEE NOTES	ISSUED	

**RANGESTAR WIRELESS™**  
 9565 SOQUEL DRIVE  
 APTOS, CALIFORNIA 95003

**DATA SHEET, 2.4GHz, ISM BAND BLUETOOTH ANT.**

SIZE DWG. NO. **B 100902-300** REV **B**

SCALE NONE SHEET 1 of 1

**CONFIDENTIAL:** THIS INFORMATION CONSTITUTES TRADE SECRETS OF RangeStar (tm) WIRELESS CORPORATION AND IS PRODUCED UNDER A NONDISCLOSURE OR MUTUAL NONDISCLOSURE AGREEMENT.

	2.4GHz ISM
NEXT ASSY	USED ON

4 3 2 1