RANGESTAR WIRELESS

Technical Specification Sheet

2.4 GHz Bluetooth™ Antenna — P/N 100902

Features

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

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.

Electrical

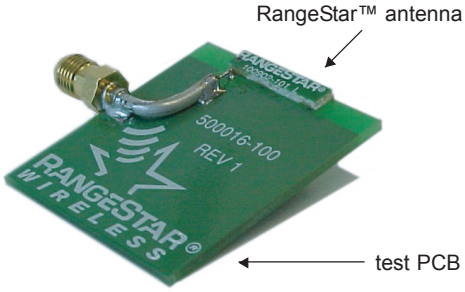
Frequency Range	2400 – 2500 MHz
Peak Gain(1)	0 dBi
VSWR(1)	less than 2.0:1
Polarization	linear
Azimuth Beamwidth	omnidirectional
Power Handling	10 Watt cw
Feed Point Impedance	50 Ohms unbalanced

Note (1) Figures dependent on ground plane size

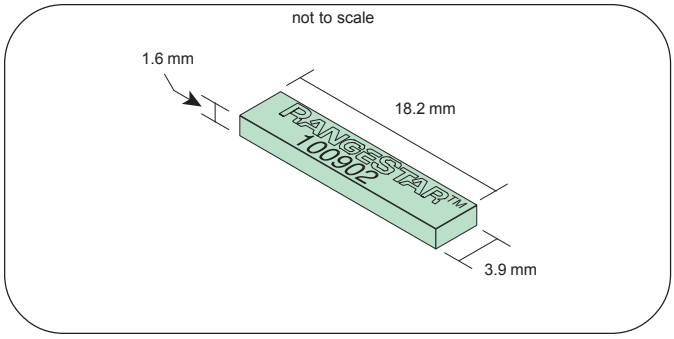
Mechanical

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

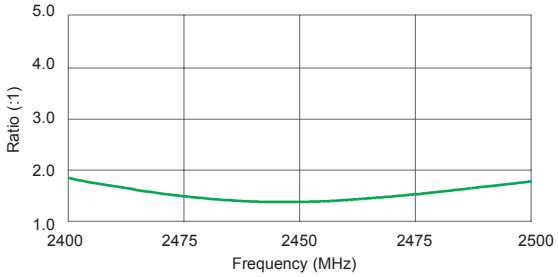
Typical Mounting



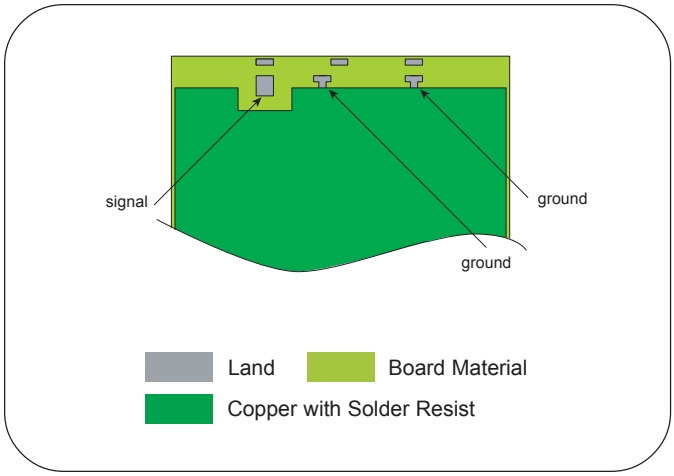
Dimensions



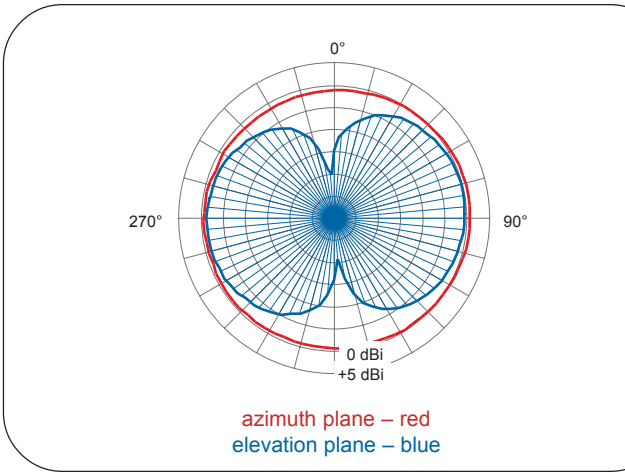
Typical VSWR



Typical Pad Layout



Typical Pattern



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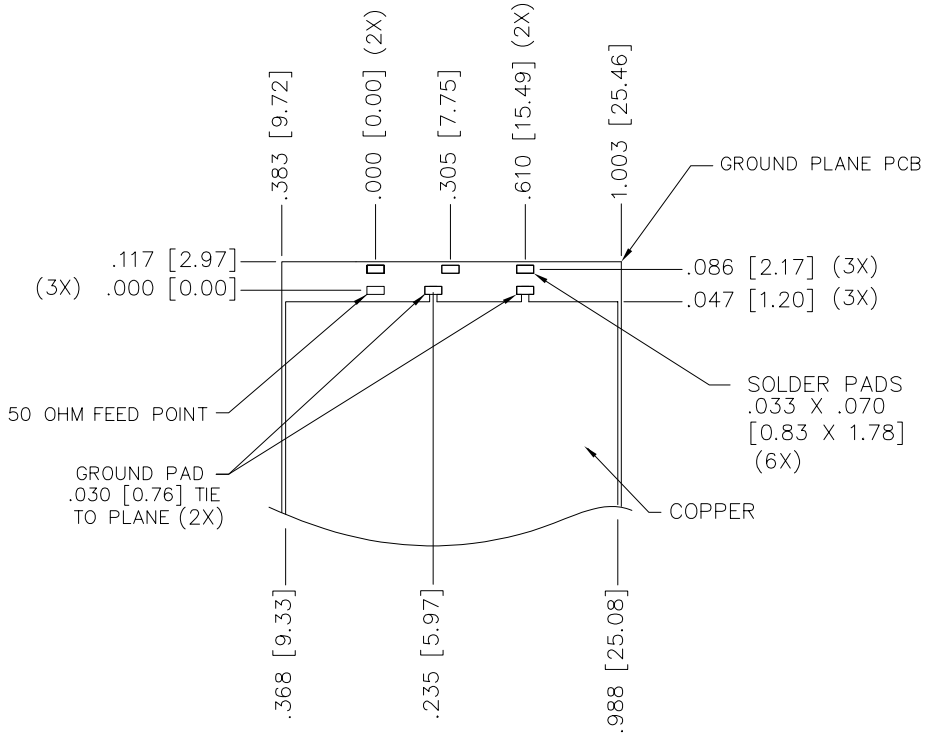
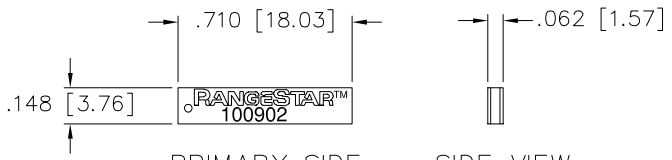
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ENG REL	3/31/00	
2	REVISED	4/5/00	
A	PROD REL PER ECO#150	7/5/00	
B	REVISED PER ECO#164	10/10/00	

SUGGESTED PCB PAD LAYOUT FOR GROUND PLANE



PRIMARY SIDE

ANTENNA (REF)



PRIMARY SIDE SIDE VIEW

NOTE – SOLDER PADS ARE ON
THE SECONDARY SIDE OF ANTENNA

–	2.4GHz ISM	
NEXT ASSY	USED ON	

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND IN [MILLIMETERS].
TOLERANCES ARE:
INCHES .XX± .01 .XXX± .005 MILLIMETERS ± [.25] ± [.127] ANGLES ± .5°

MATERIAL: SEE NOTES

FINISH: SEE NOTES

DO NOT SCALE DRAWING

APPROVALS	DATE
DRAWN R JONEZ	6/19/00
CHECK	
ENG	
MKTNG	
ISSUED	

RANGESTAR WIRELESS™
9565 SOQUEL DRIVE
APTOS, CALIFORNIA 95003

DATA SHEET, 2.4GHz, ISM BAND BLUETOOTH ANT.

SIZE	DWG. NO.	REV
B	100902-300	B

SCALE NONE SHEET 1 of 1