

Xircom, Inc.

Performance Summary for:

Springport Wireless Ethernet Folded Dipole Antenna

Intellectual Property Disclosure in Process



SWE Antenna Description

The performance characteristics of the SWE folded dipole antenna have been optimized with the SWE SpringPort module mated to the HandSpring Visor PDA. When installed in the SWE module, the antenna becomes a matching element to the SWE module PC card and the radiated fields propagate across the module PC card and then radiate off the leading edge of that card. The resulting radiation pattern exhibits a monopole type radiation pattern with a null along the major axis of the module and pattern peaks at approximately 30° to 50° from the major axis in the direction of the SWE card. The radiated field thus observed is polarized along the axis of the card.

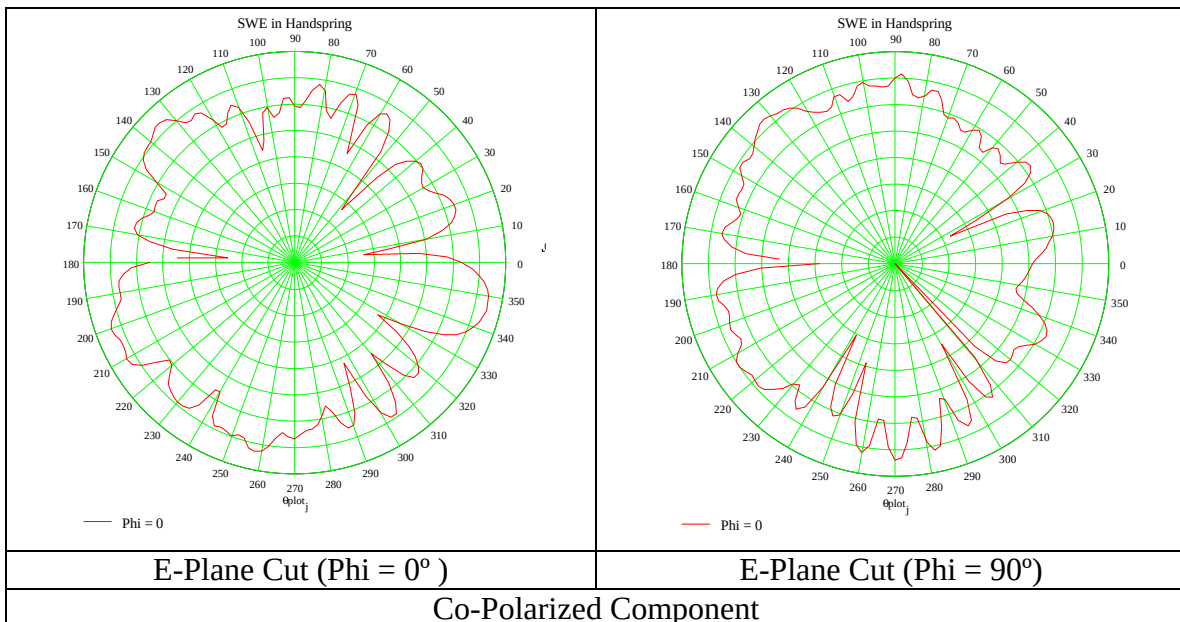
DTA 3.0 Specification Summary

Electrical

Frequency	2400-2480MHz
Nominal Peak Antenna Gain	2.0 dBi
Nominal 3 dB Beamwidth	
E-Plane	N/A (Bifurcated Beam Pattern)
H-Plane	360°
Polarization	Vertical (Along Major Axis of Card)
Input VSWR	1.4:1 Max
Input Impedance	50 ohms
Maximum Power Input	10 watts
PIM	N/A
Static Protection	Element and Feed are DC Grounded

Mechanical

Dimensions	7.5mm L x 40.4mm W (etched on circuit board material)
Input Connector	MMCX Edge Mount
Weight	N/A
Wind Area	N/A
Wind Load	N/A





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 ⁽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

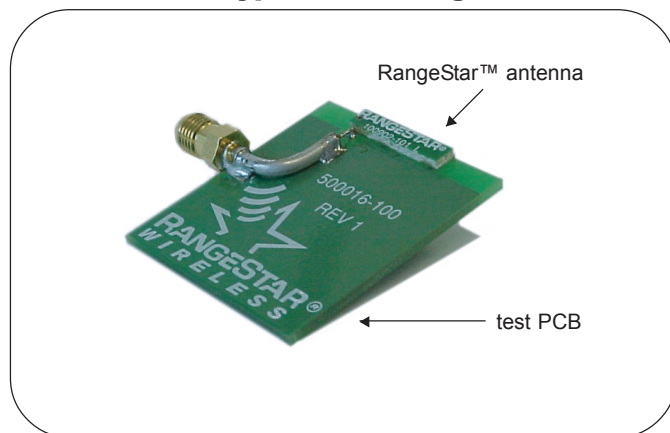
Mechanical

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

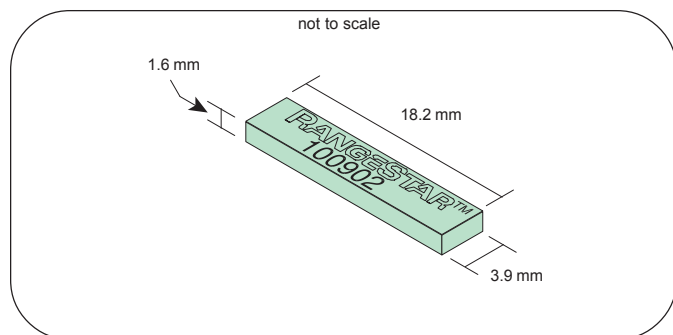
Ultima™ Series Antennas

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

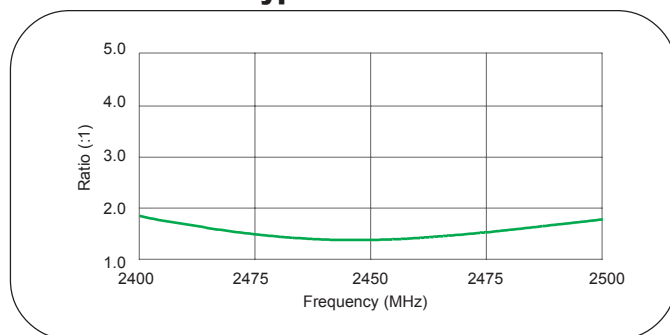
Typical Mounting



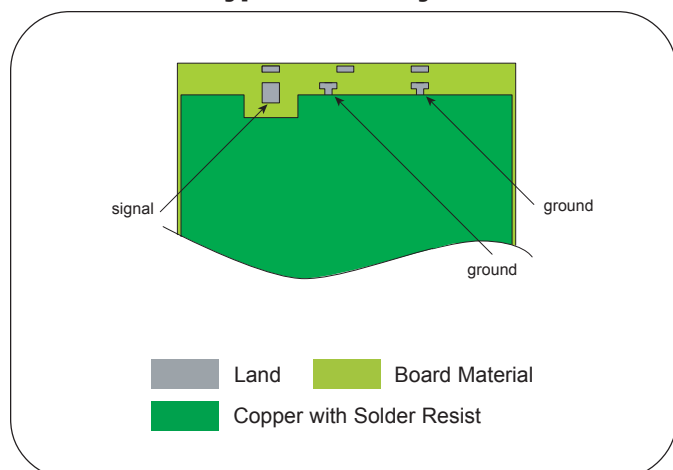
Dimensions



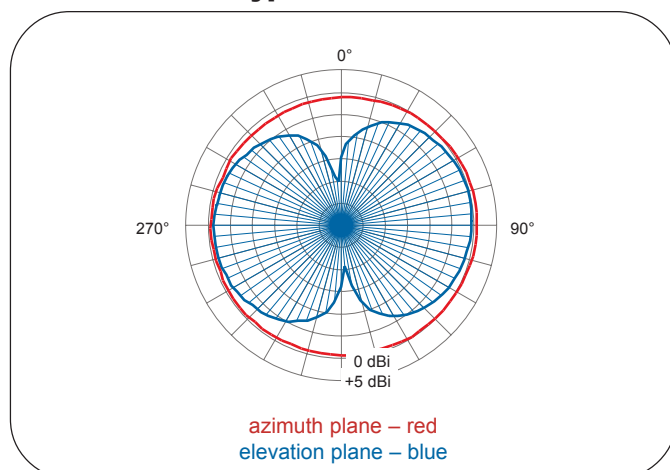
Typical VSWR



Typical Pad Layout



Typical Pattern



4

3

2

1

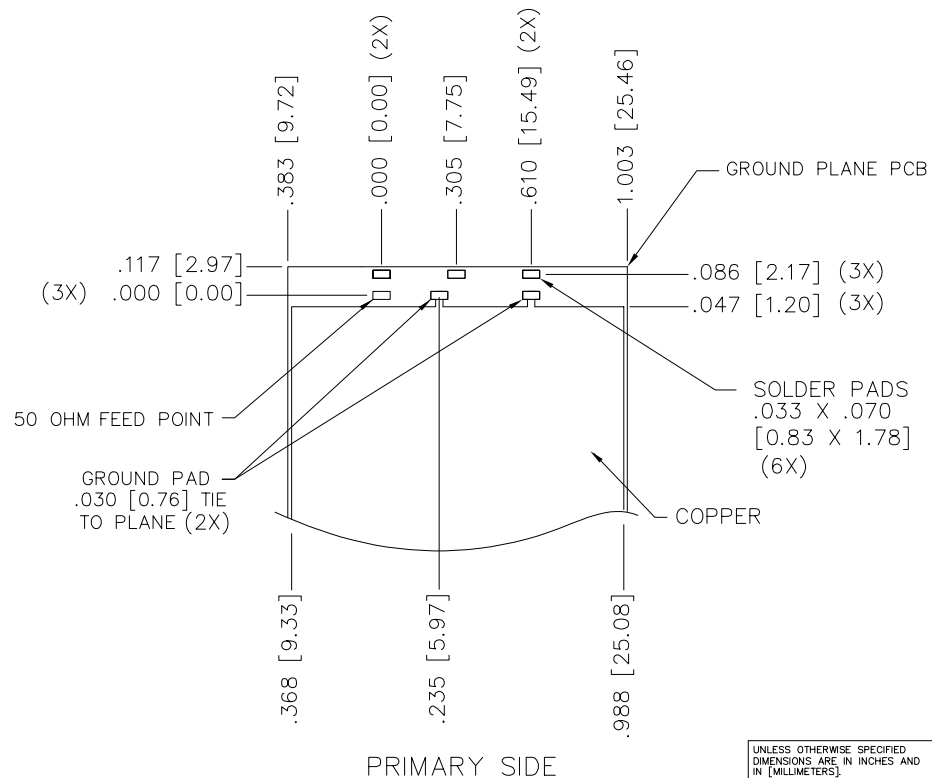
D

C

B

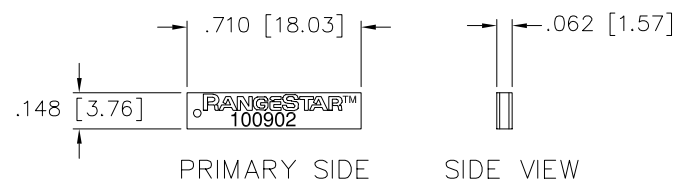
A

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	

ANTENNA (REF)



NOTE - SOLDER PADS ARE ON THE SECONDARY SIDE OF ANTENNA

D

C

B

A

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	2.4GHz ISM
NEXT ASSY	USED ON

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

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 95003DATA SHEET, 2.4GHz,
ISM BAND BLUETOOTH ANT.

SIZE B	DWG. NO. 100902-300	REV B
SCALE NONE	SHEET 1 of 1	

4

3

2

1