



**THE DATASHEET OF  
3100AT51A7200E**



# High Frequency Ceramic Solutions

**Ultra Wide Band (UWB) Chip Antenna 3.1 -10.3 GHz**

**P/N 3100AT51A7200**

Detail Specification: 08/29/2008

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## General Specifications

<b>Part Number</b>	3100AT51A7200
<b>Freq. Range (GHz)</b>	3100 - 10300
<b>Peak Gain (XZ-V)</b>	1.5 dBi typ.
<b>Average Gain (XZ-V)</b>	-3.5 dBi typ.
<b>Return Loss</b>	9.5 dB min.

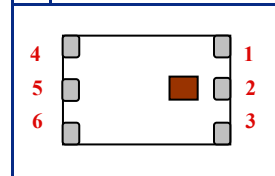
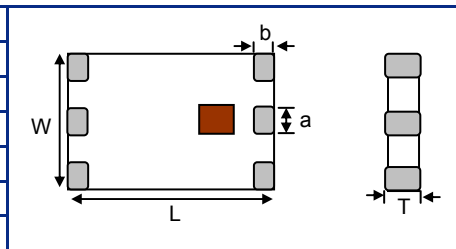
<b>Input Power</b>	3W max.
<b>Impedance</b>	50 $\Omega$
<b>Operating Temp.</b>	-40 to +85°C
<b>Reel Quantity</b>	1,000

<b>P/N</b>	<b>Packaging Style</b>	Bulk	Suffix = S	Eg. 3100AT51A7200S
		T & R	Suffix = E	Eg. 3100AT51A7200E
<b>Suffix</b>	<b>Termination Style</b>	100% Tin	Suffix = None	Eg. 3100AT51A7200(E or S)
		Tin / Lead	Suffix = /Pb	Eg. 3100AT51A7200(E or S)/Pb

Terminal Configuration	
No.	Function
1	GND
2	Feeding Point
3	GND
4	NC
5	NC
6	NC

## Mechanical Dimensions

	In	mm
<b>L</b>	0.394 $\pm$ 0.012	10.00 $\pm$ 0.30
<b>W</b>	0.236 $\pm$ 0.012	6.00 $\pm$ 0.30
<b>T</b>	0.047 $\pm$ 0.008	1.20 $\pm$ 0.20
<b>a</b>	0.039 $\pm$ 0.012	1.00 $\pm$ 0.30
<b>b</b>	0.020 $\pm$ 0.012	0.50 $\pm$ 0.30

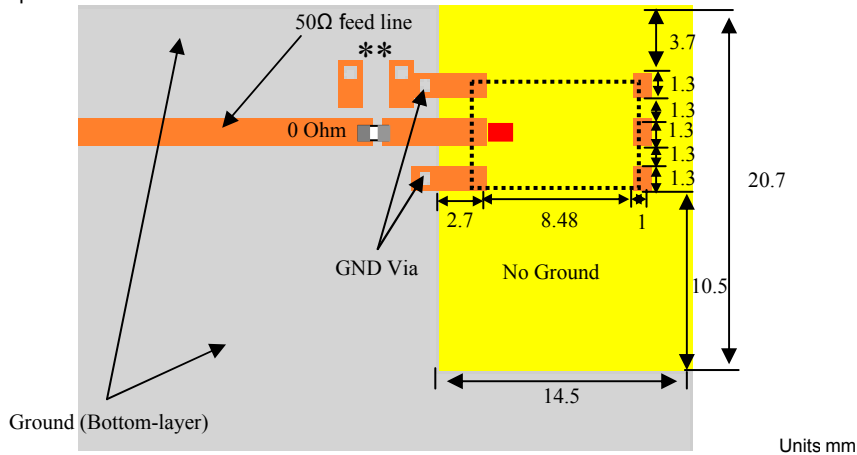


## Mounting Considerations

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

\* Line width should be designed to provide 50  $\Omega$  imped. matching characteristics, depending on PCB material and thickness.

\*\*No matching circuit required



Johanson Technology, Inc. reserves the right to make design changes without notice.

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[www.johansontechnology.com](http://www.johansontechnology.com)

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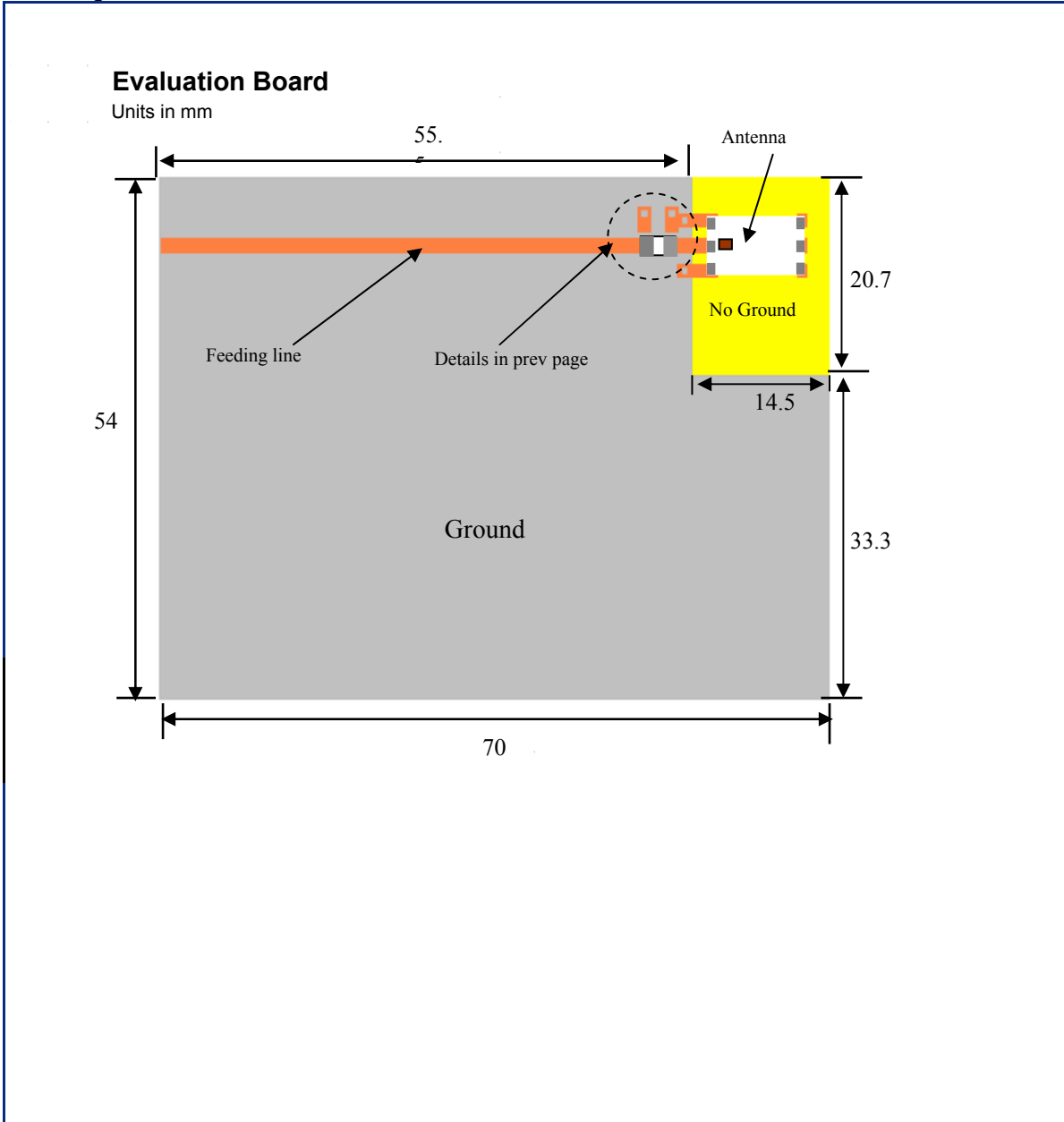
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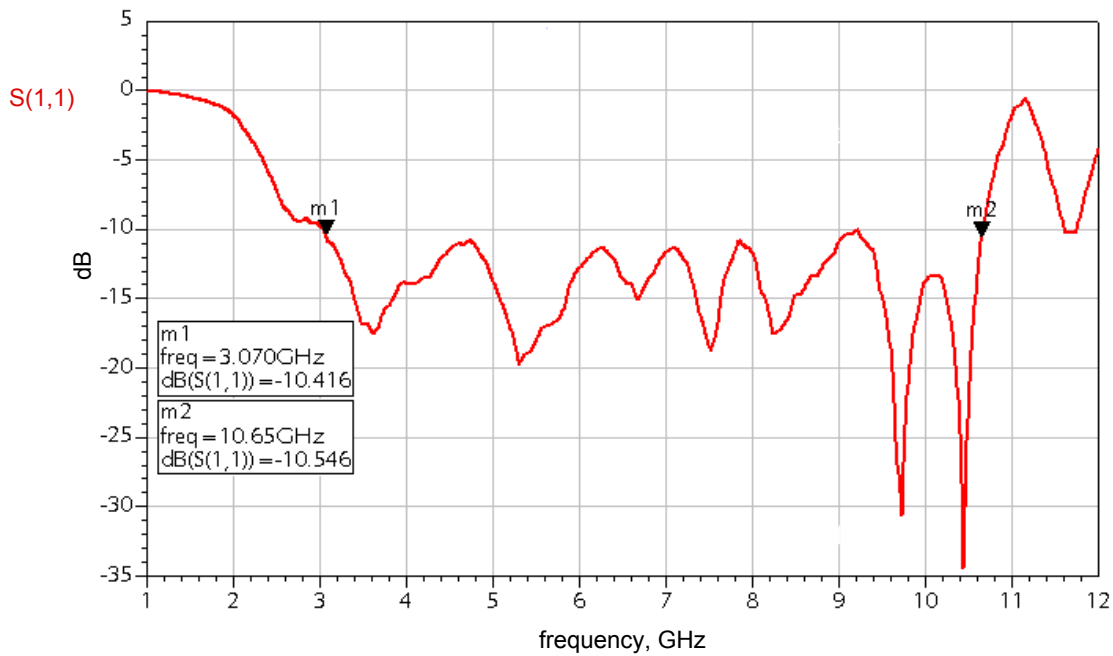
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## Electrical Performance (At room temp 25°C)

### Return Loss & Isolation



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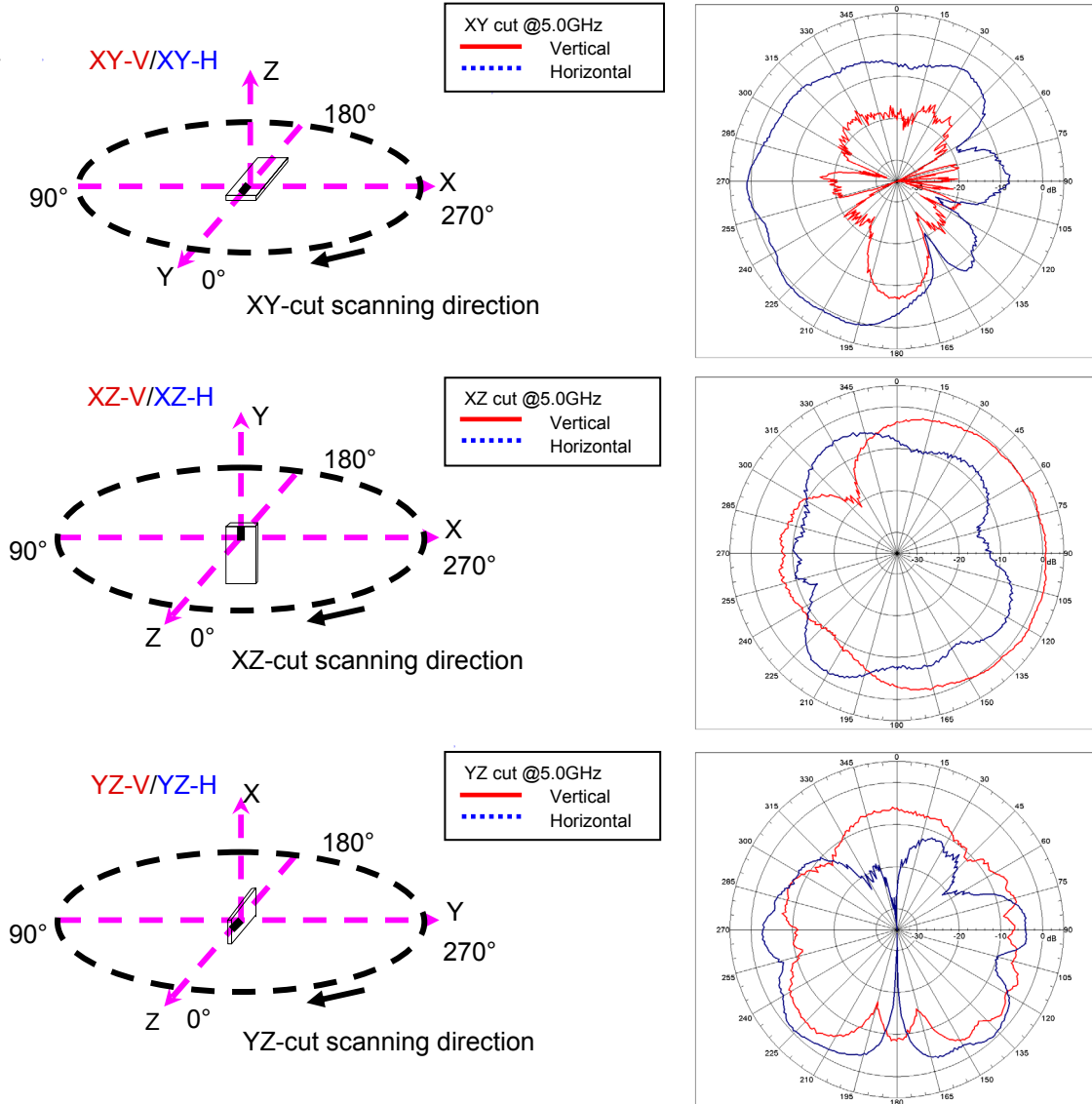
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## Antenna Radiation Patterns



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