

High Frequency Ceramic Solutions

Ultra Wide Band (UWB) Chip Antenna 3.1 -10.3 GHz	P/N 3100AT51A7200
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General Specifications	
Part Number	3100AT51A7200
Freq. Range (GHz)	3100 - 10300
Peak Gain (XZ-V)	1.5 dBi typ.
Average Gain (XZ-V)	-3.5 dBi typ.

Input Power	3W max.
Impedance	50 Ω
Operating Temp.	-40 to +85°C
Reel Quantity	1,000

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

Mechanical Dimensions		
	In	mm
L	0.394 ± 0.012	10.00 ± 0.30
W	0.236 ± 0.012	6.00 ± 0.30
T	0.047 ± 0.008	1.20 ± 0.20
a	0.039 ± 0.012	1.00 ± 0.30
b	0.020 ± 0.012	0.50 ± 0.30

5	NC
6	NC

The diagram illustrates a rectangular frame with a central square hole. The frame has an outer width W and an outer length L . The central hole has a side length a . The frame's thickness is denoted by b . A cross-section view on the right shows the frame's profile with a total thickness T .

Mounting Considerations

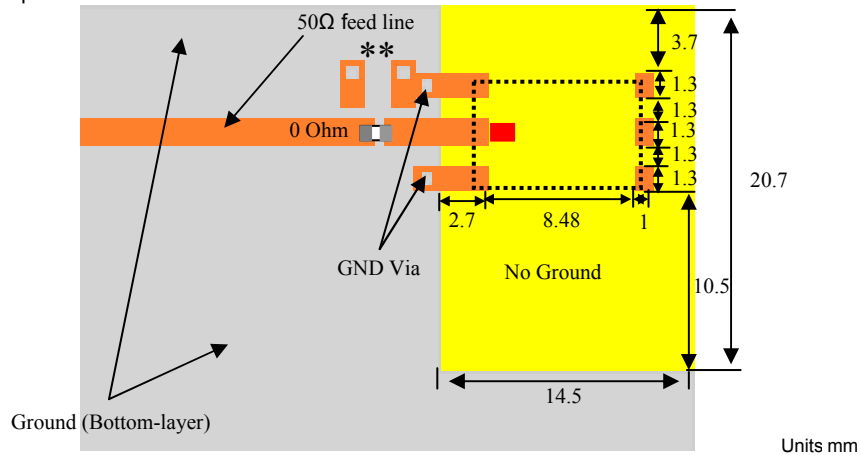
Mount these devices with white mark facing up. Units: mm

- * Line width should be designed to provide 50 Ω imped. matching characteristics, depending on PCB material and thickness.
- **No matching circuit required

Diagram illustrating the mounting considerations for a device on a PCB. The layout shows a 50 Ω feed line, a 0 Ohm resistor, and a GND Via. Dimensions are provided in mm: 20.7, 10.5, 14.5, 8.48, 2.7, 1, 3.7, 1.3, 1.3, 1.3, 1.3, 1.3. The diagram also shows a 'No Ground' area and a 'Ground (Bottom-layer)' area.

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

****No matching circuit required**



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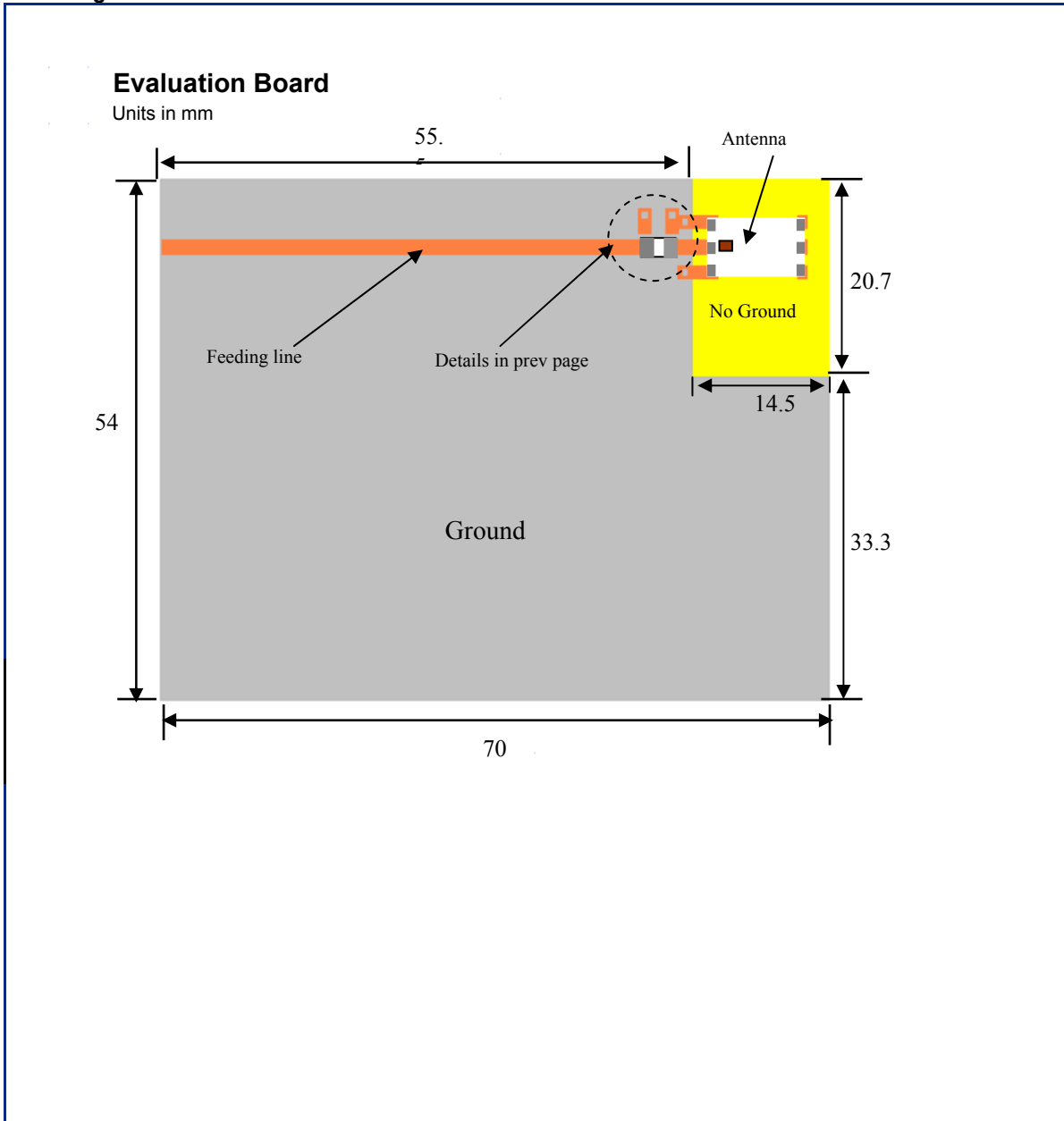
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Mounting Considerations



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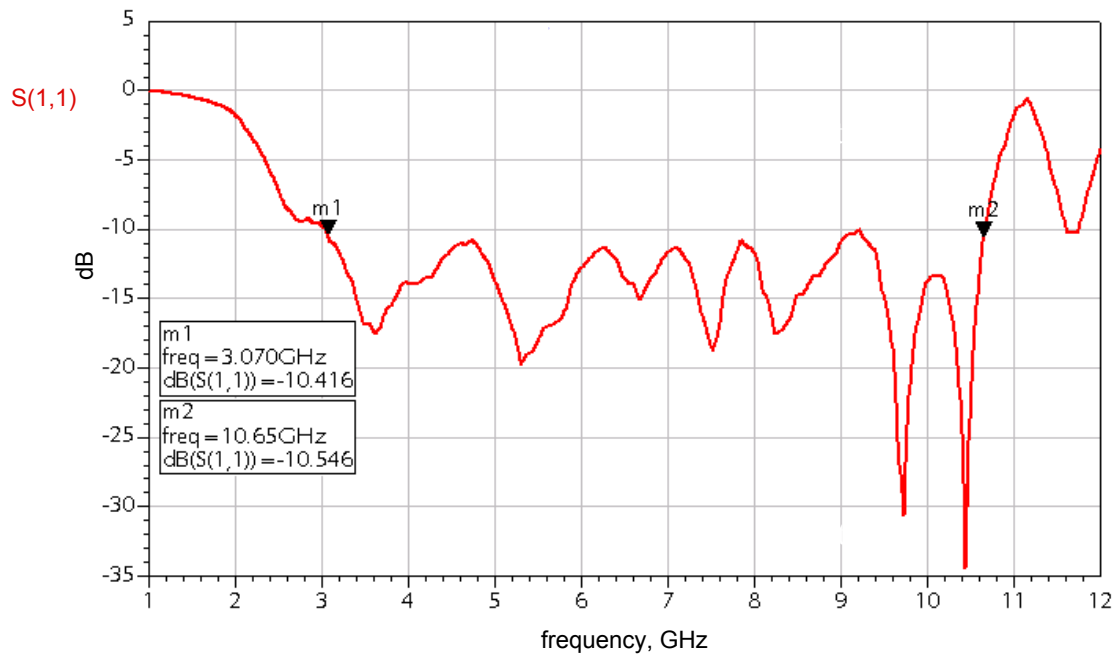
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Electrical Performance (At room temp 25°C)

Return Loss & Isolation



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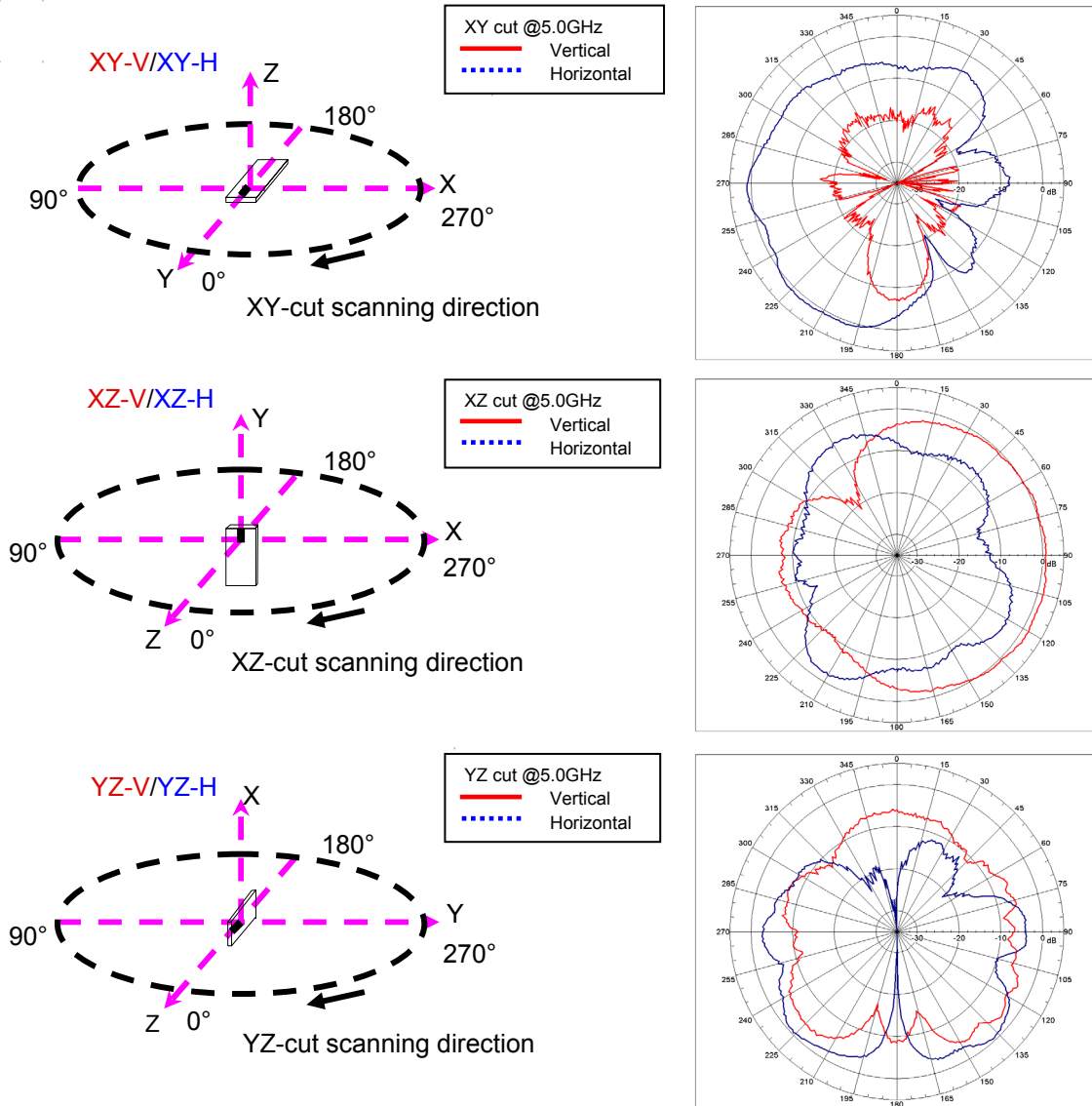
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Antenna Radiation Patterns



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