

# Preliminary "High Frequency Ceramic Solutions"

**2.5GHz Chip Antenna (No GND clearance required)**

**P/N 2500AT43A0100**

Detail Specification: 01/21/2009

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## General Specifications

Part Number	2500AT43A0100
Frequency Range	2450 - 2550
Peak Gain	0.6 dBi typ. (YZ-total)
Average Gain	-2.1 dBi typ. (XZ-total)
Return Loss	3.0 dB min.
Impedance	50 Ω
Input Power	2W max.

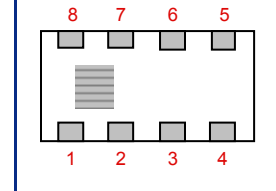
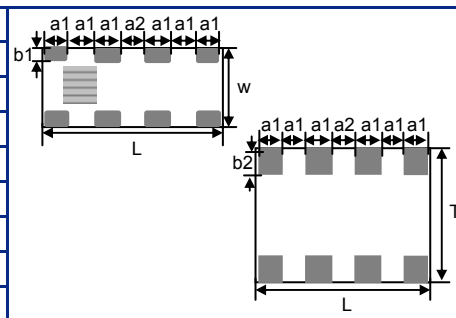
Operating Temperature	-40 to +85°C
Storage Temperature Range	+5~+35°C, Humidity 45~75%RH
Reel Quantity	1,000

## Terminal Configuration

No.	Function
1	Feeding Point
2	GND
3	GND
4	NC
5	NC
6	GND
7	GND
8	GND

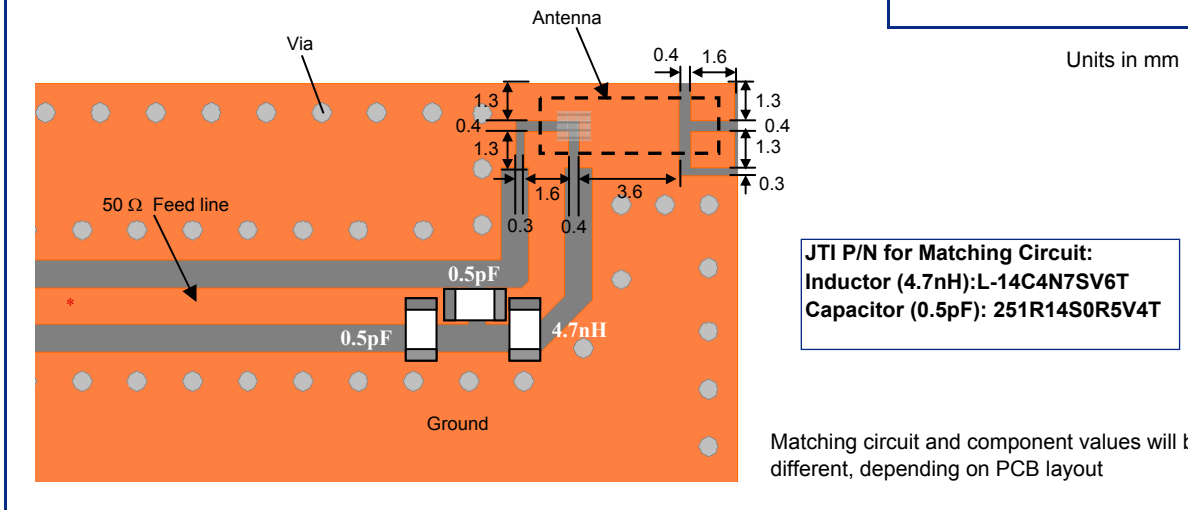
## Mechanical Dimensions

	In	mm
L	0.276 ± 0.008	7.00 ± 0.20
W	0.079 ± 0.008	2.00 ± 0.20
T	0.157 ± 0.008	4.00 ± 0.20
a1	0.033 ± 0.008	0.85 ± 0.20
a2	0.039 ± 0.008	1.00 ± 0.20
b1	0.020 ± 0.008	0.50 ± 0.20
b2	0.039 ± 0.008	1.00 ± 0.20



## Mounting Considerations

\*Line width should be designed to match 50 Ω characteristic impedance, depending on PCB material and thickness



**JTI P/N for Matching Circuit:**  
**Inductor (4.7nH): L-14C4N7SV6T**  
**Capacitor (0.5pF): 251R14S0R5V4T**

Matching circuit and component values will be different, depending on PCB layout

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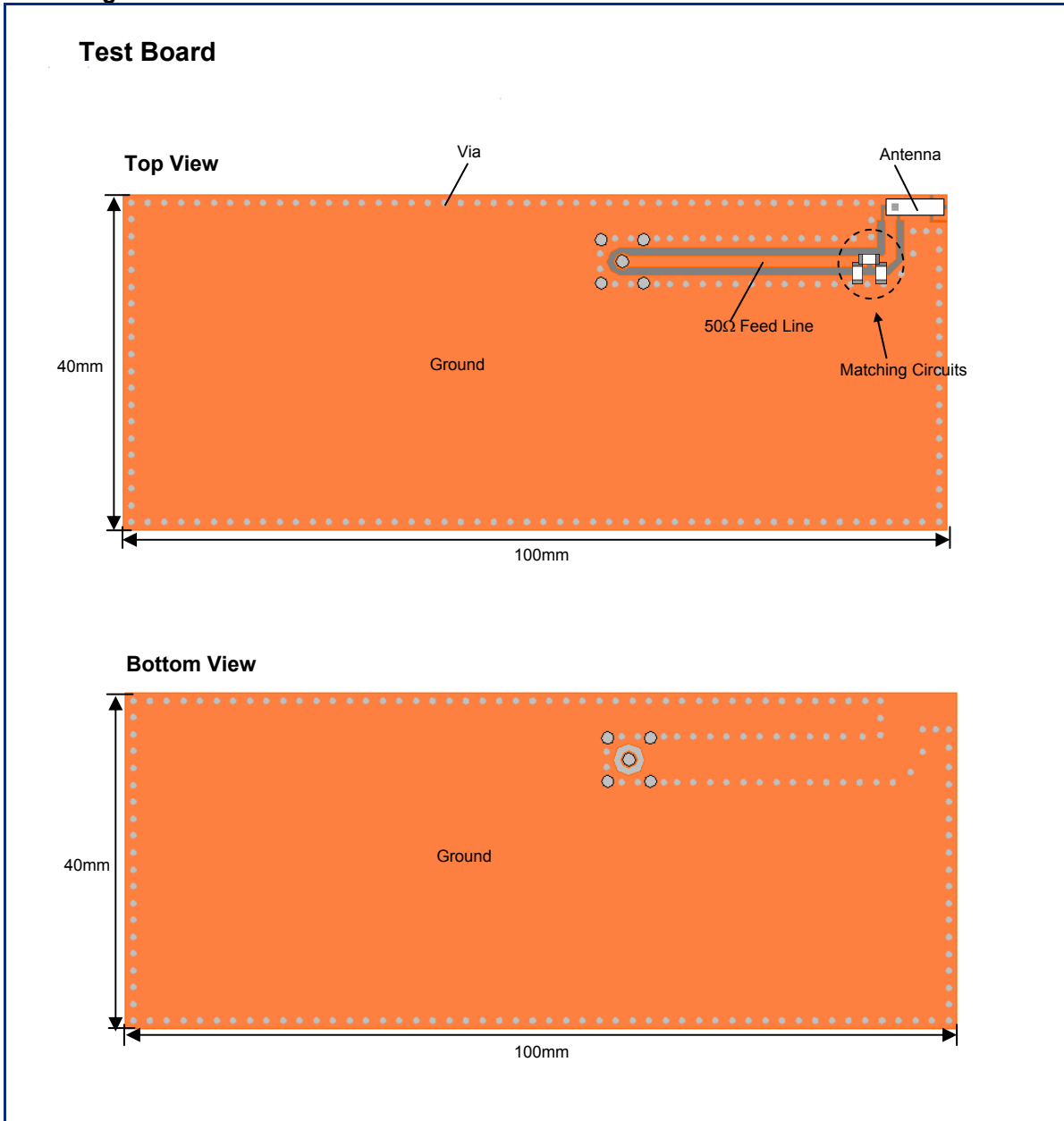
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## Mounting Considerations



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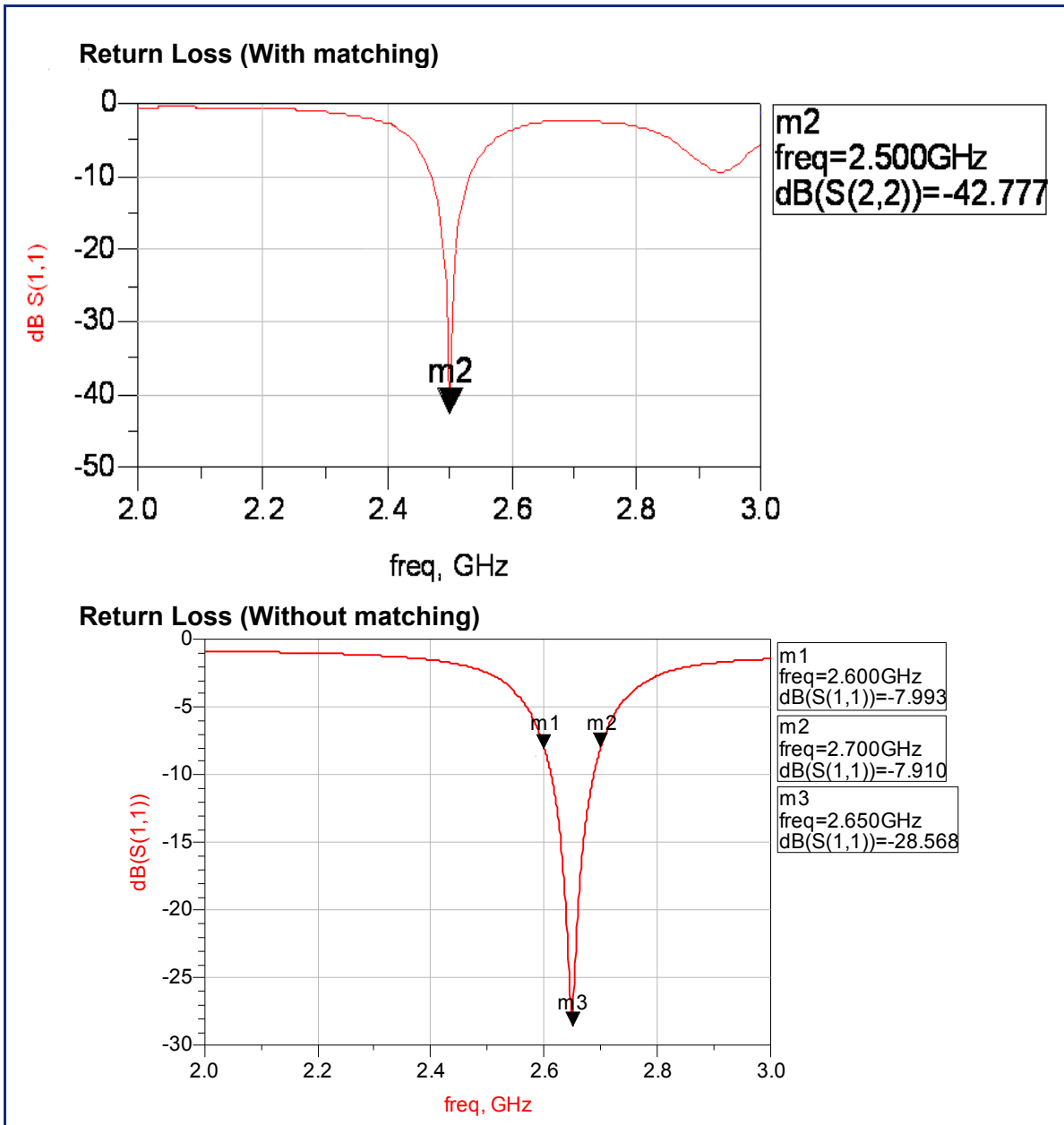
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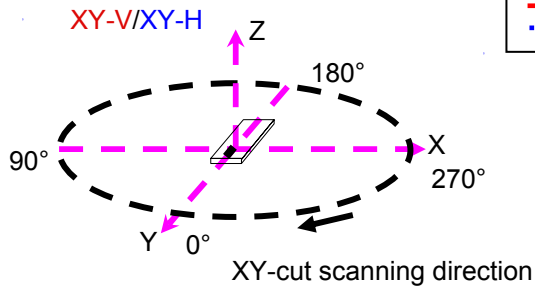
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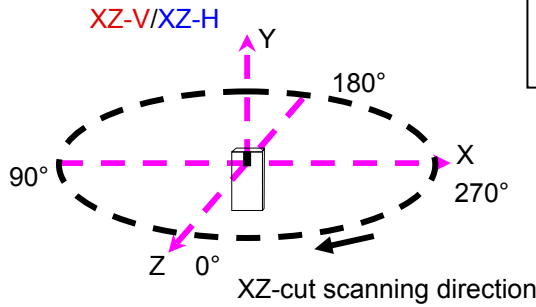
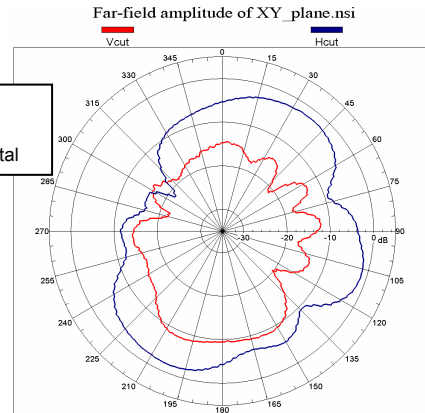
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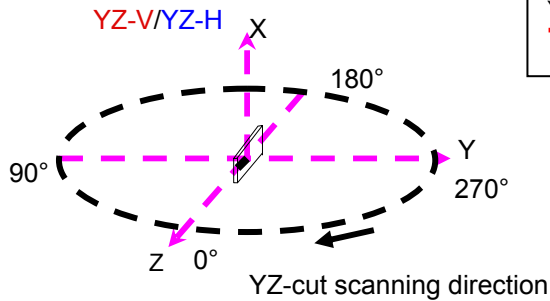
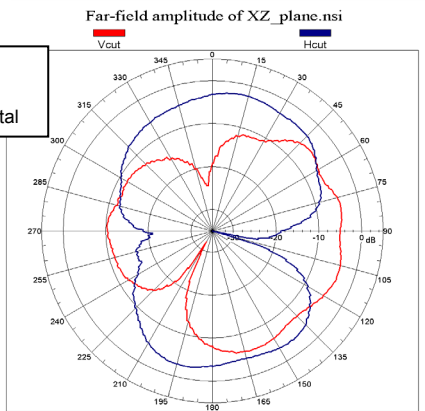
## Typical Radiation Patterns



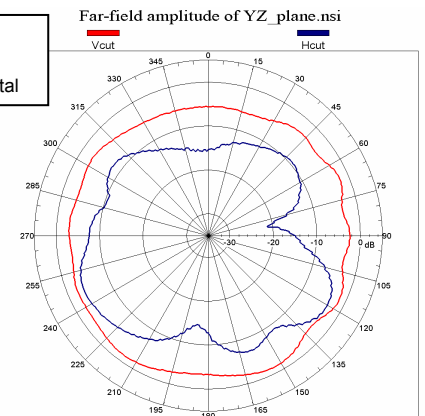
XY cut @2.5GHz  
 — Vertical  
 ..... Horizontal



XZ cut @2.5GHz  
 — Vertical  
 ..... Horizontal



YZ cut @2.5GHz  
 — Vertical  
 ..... Horizontal



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