

# "High Frequency Ceramic Solutions"

## 5.775 GHz Antenna

P/N 5775AT43A100

Detail Specification: 03/09/05

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### General Specifications

Part Number	5775AT43A100
Frequency Range	5725 - 5825 Mhz
Peak Gain	3.9 dBi typ. (XZ-V)
Average Gain	-1.5 dBi typ. (XZ-V)
Return Loss	9.5 dB min.

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

No.	Function	Terminal Configuration
1	Input	
2	NC	

### Mechanical Dimensions

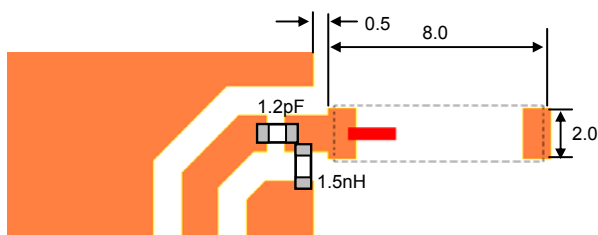
	In	mm		
L	0.276 ± 0.008	7.00 ± 0.20		
W	0.079 ± 0.008	2.00 ± 0.20		
T	0.047 +.004/-0.008	1.20 +0.1/-0.2		
a	0.020 ± 0.012	0.50 ± 0.30		

### Mounting Considerations (Close Up)

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

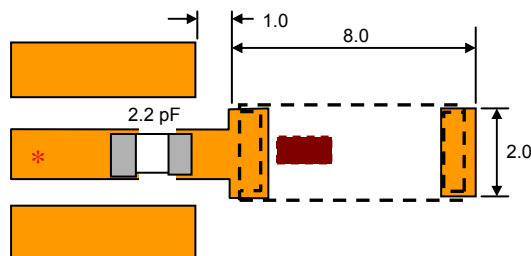
\* Line width should be designed to provide 50Ω impedance matching characteristics.

#### With Matching Circuit (Horizontal Mounting Situation)



JTI P/N for Matching Circuit:  
Cap (1.2pF): 500R07S1R2BV4T  
Inductor (1.5nH): L-07C1N5SV6T

#### With Matching Circuit (Vertical Mounting Situation)



JTI P/N for Matching Circuit:  
Cap (2.2pF): 500R07S2R2BV4T

(Matching components, if used, will vary in value depending on PCB layout)

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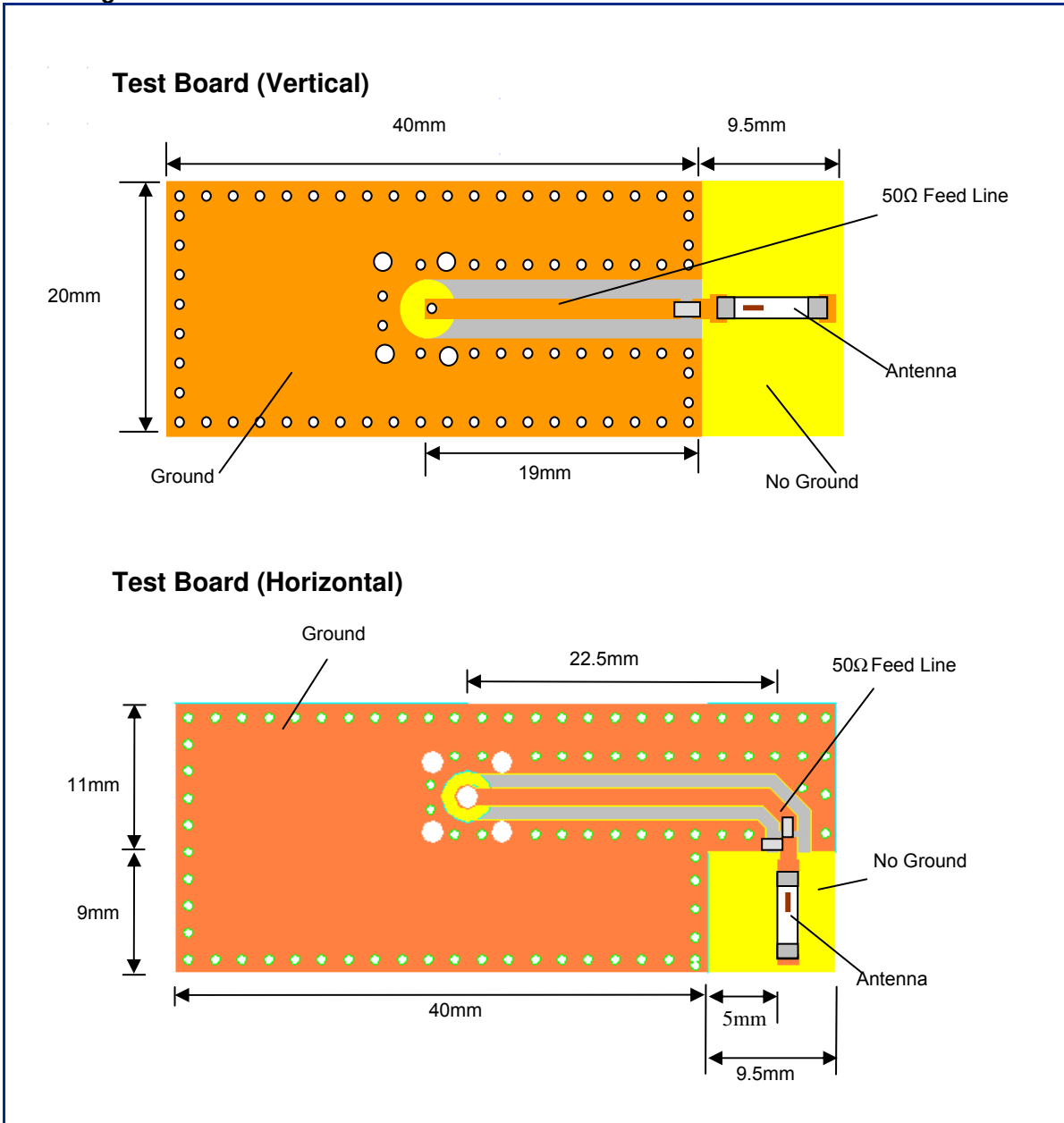
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## Mounting Considerations



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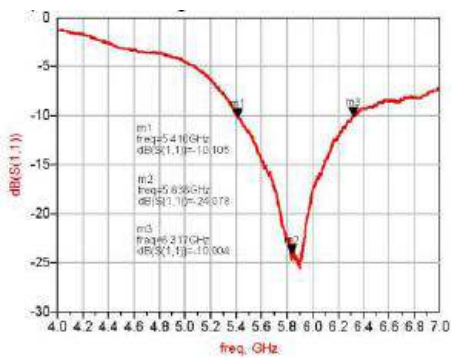
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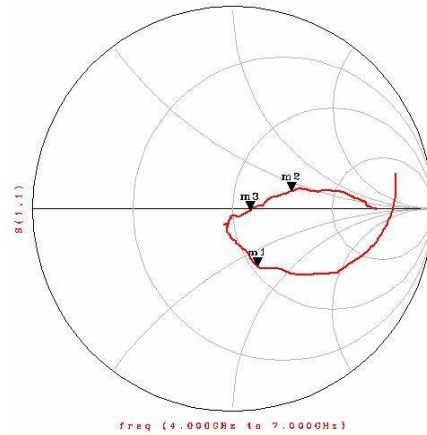
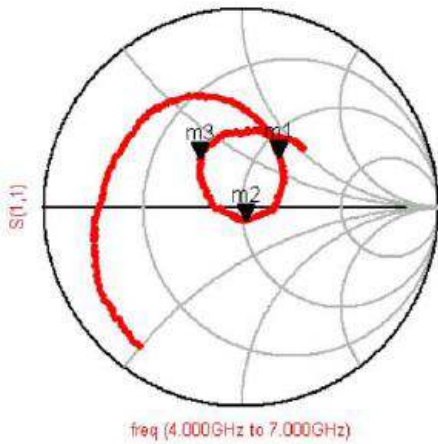
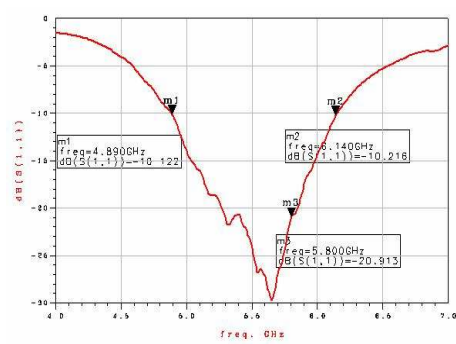
## Typical Electrical Characteristics (T=25°C)

### Return Loss

**Vertical Test Board  
(with matching components)**



**Horizontal Test Board  
(with matching components)**



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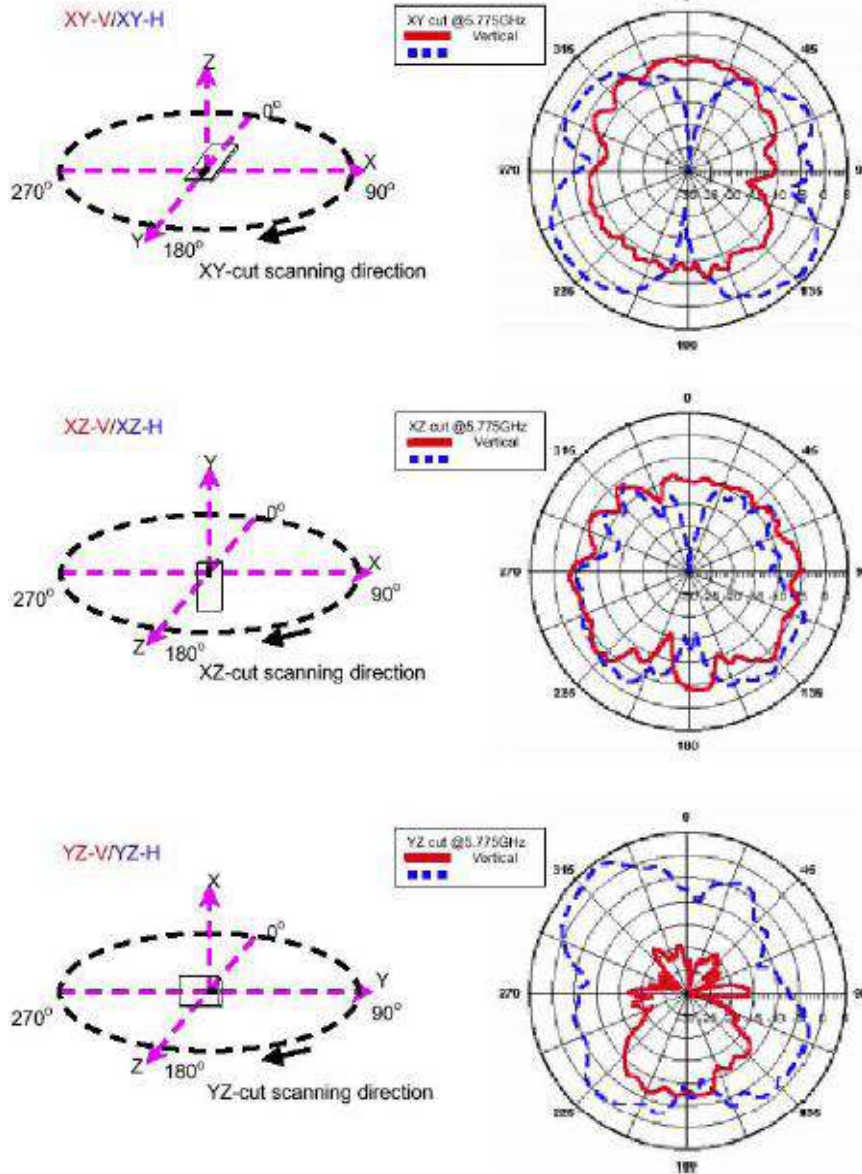
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## Typical Radiation Patterns (Vertical Test Board)



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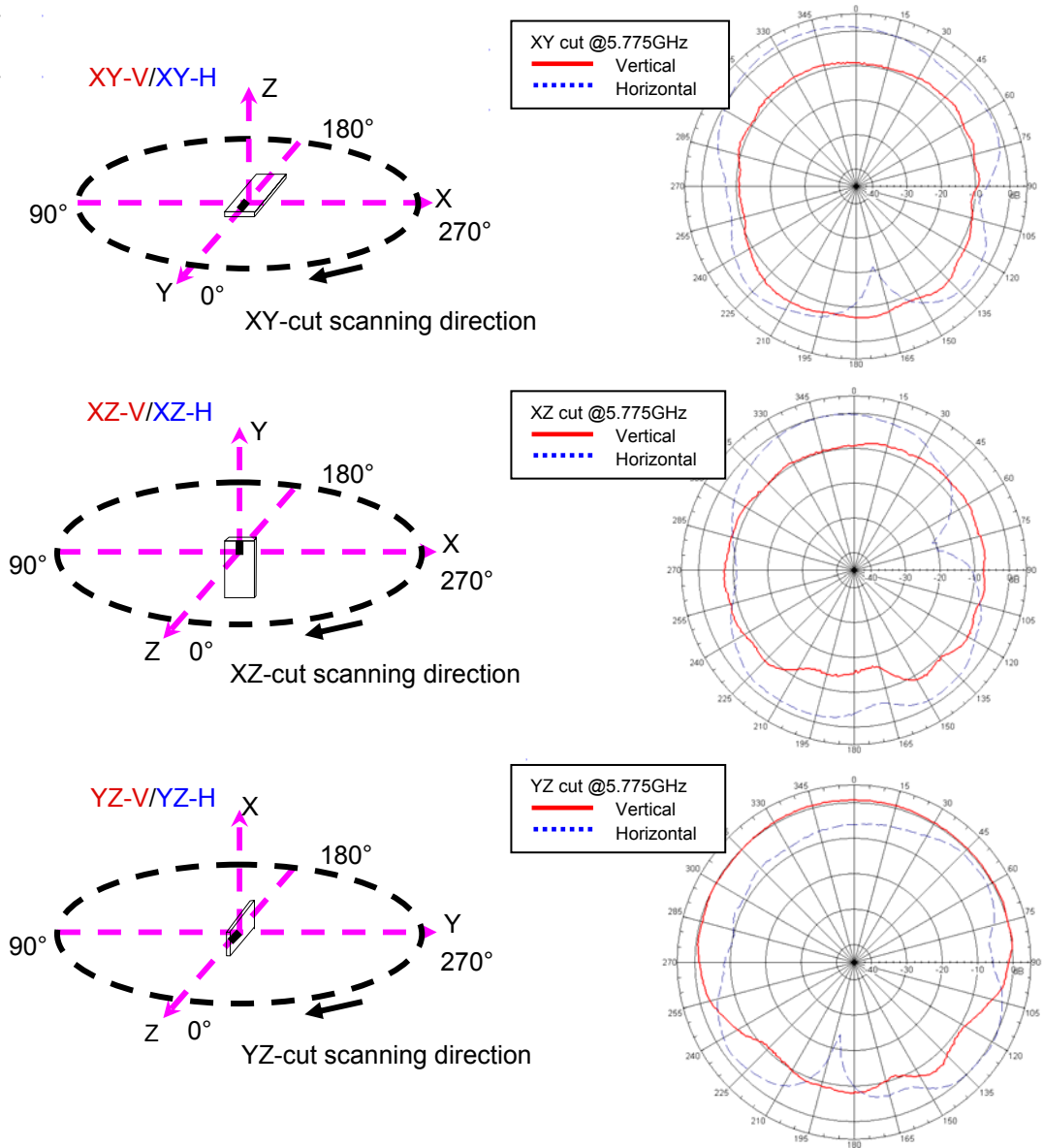
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## Typical Radiation Patterns (Horizontal Test Board)



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