

# "High Frequency Ceramic Solutions"

## 2450 MHz Antenna

Detail Specification: 08/10/09

P/N 2450AT18B100

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### General Specifications

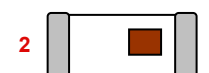
|                 |                      |
|-----------------|----------------------|
| Part Number     | 2450AT18B100         |
| Frequency Range | 2400 - 2500 Mhz      |
| Peak Gain       | 0.5 dBi typ. (XZ-V)  |
| Average Gain    | -0.5 dBi typ. (XZ-V) |
| Return Loss     | 9.5 dB min.          |

|                       |              |
|-----------------------|--------------|
| Input Power           | 3W max.      |
| Impedance             | 50 $\Omega$  |
| Operating Temperature | -40 to +85°C |
| Reel Quantity         | 3,000        |

|               |                      |            |                        |                          |
|---------------|----------------------|------------|------------------------|--------------------------|
| P/N<br>Suffix | Packaging<br>Style   | Bulk       | Suffix = S             | Eg. 2450AT18B100S        |
|               |                      | T & R      | Suffix = E             | Eg. 2450AT18B100E        |
|               | Termination<br>Style | 100% Tin   | Suffix = None          | Eg. 2450AT18B100(E or S) |
|               |                      | Tin / Lead | Please consult Factory |                          |

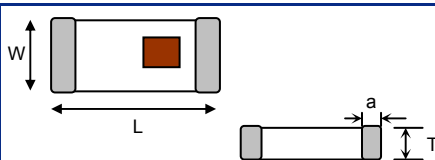
### Terminal Configuration

| No. | Function      |
|-----|---------------|
| 1   | Feeding Point |
| 2   | NC            |



### Mechanical Dimensions

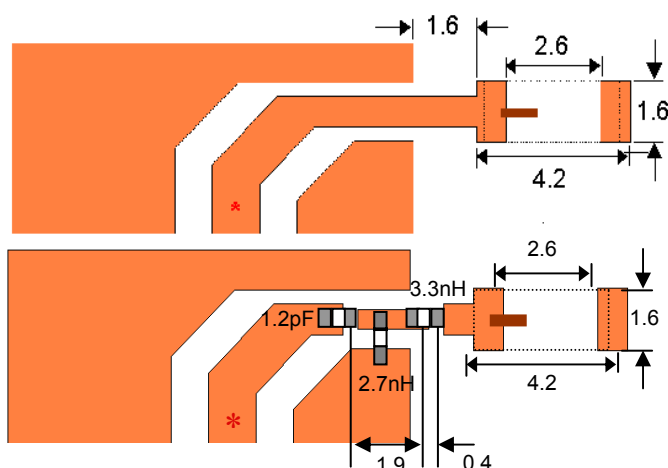
|   | In                       | mm                  |
|---|--------------------------|---------------------|
| L | 0.126 $\pm$ 0.008        | 3.20 $\pm$ 0.20     |
| W | 0.063 $\pm$ 0.008        | 1.60 $\pm$ 0.20     |
| T | 0.051 $\pm$ 0.004/-0.008 | 1.30 $\pm$ 0.1/-0.2 |
| a | 0.020 $\pm$ 0.012        | 0.50 $\pm$ 0.30     |



### Mounting Considerations

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

Line width should be designed to provide 50  $\Omega$  impedance matching characteristics.



a) Without Matching Circuits

b) With Matching Circuits

JTI P/N for Matching Circuit:  
Cap (1.2pF): 500R07S1R2BV4T  
Inductor (2.7nH): L-07C2N7SV6T  
Inductor (3.3nH): L-07C3N3SV6T

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

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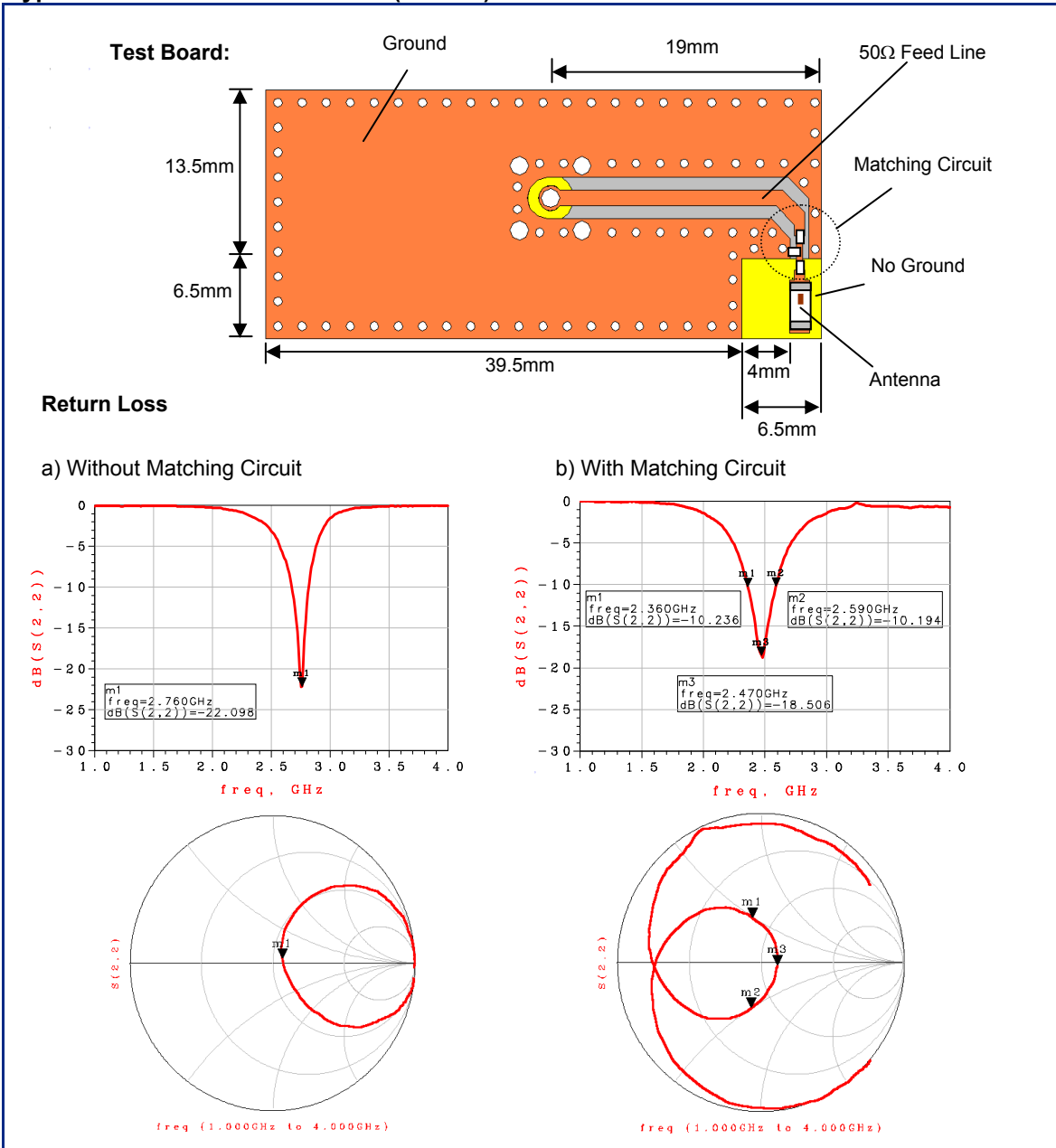
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## Typical Electrical Characteristics (T=25°C)



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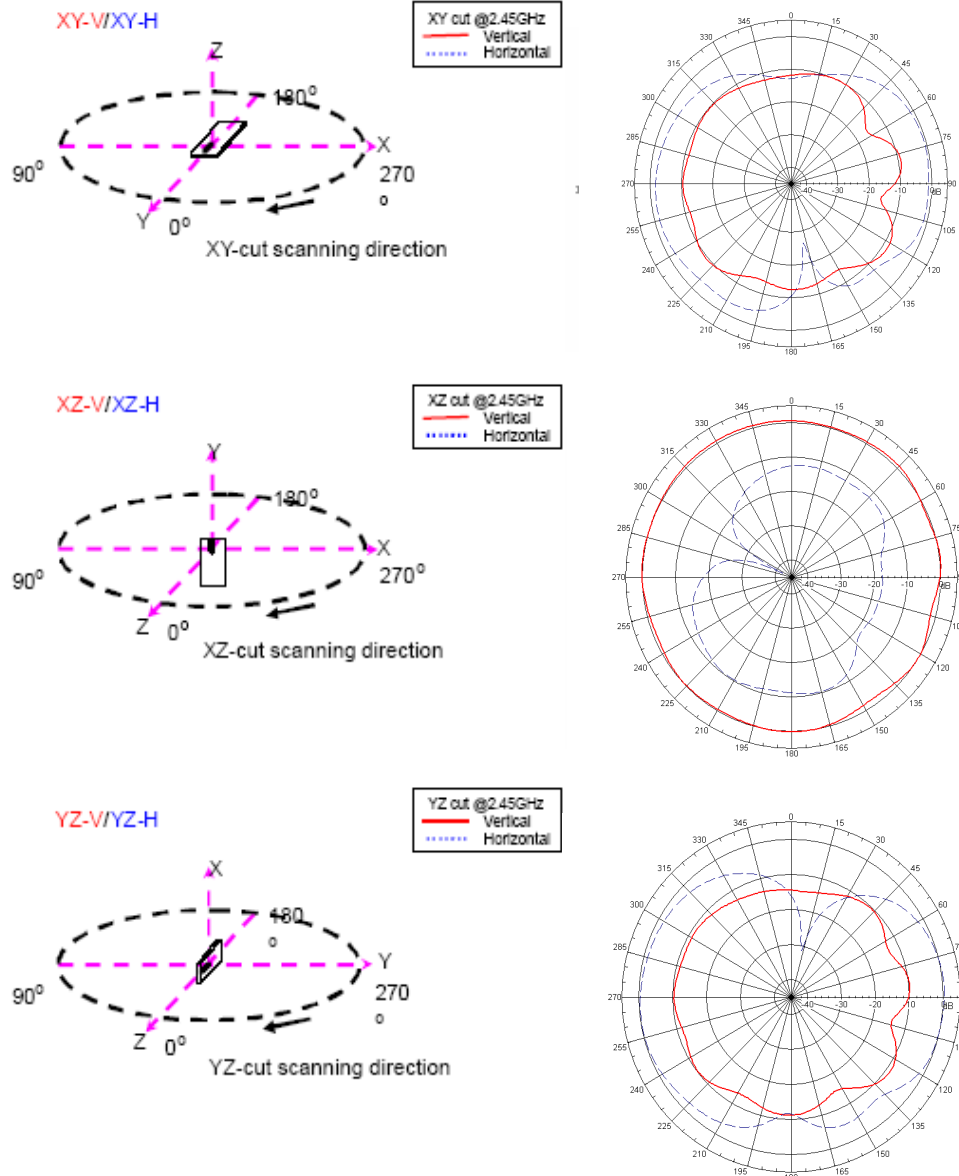
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### Typical Radiation Patterns



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