

# "High Frequency Ceramic Solutions"

## 2450 MHz Antenna

P/N 2450AT18B100

Detail Specification: 03/08/2016

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### General Specifications

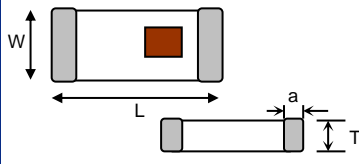
Part Number	2450AT18B100	Input Power	2W max.
Frequency Range	2400 - 2500 Mhz	Impedance	50 Ω
Peak Gain	0.5 dBi typ. (XZ-V)	Operating Temperature	-45°C to 125°C
Average Gain	-0.5 dBi typ. (XZ-V)	Reel Quantity	3,000
Return Loss	9.5 dB min.		

### Part Number Explanation

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


### Mechanical Dimensions

	In	mm
L	0.126 ± 0.008	3.20 ± 0.20
W	0.063 ± 0.008	1.60 ± 0.20
T	0.051 +.004/-.008	1.30 +0.1/-0.2
a	0.020 ± 0.012	0.50 ± 0.30



### Terminal Configuration

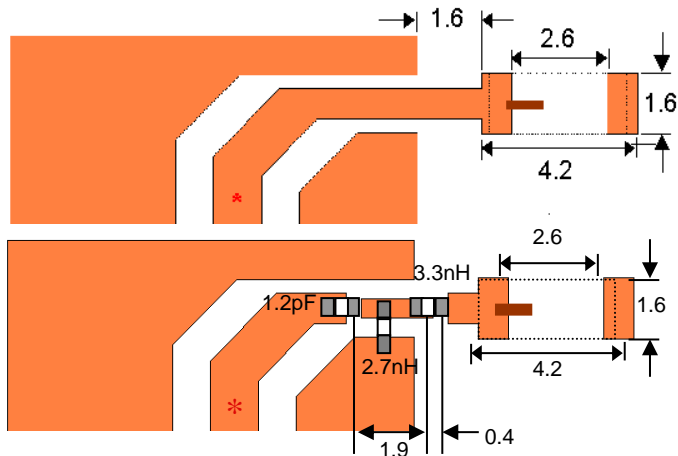
No.	Function
1	Feeding Point
2	NC



### Mounting Considerations

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

Line width should be designed to provide 50 Ω 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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Ver.2.1

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

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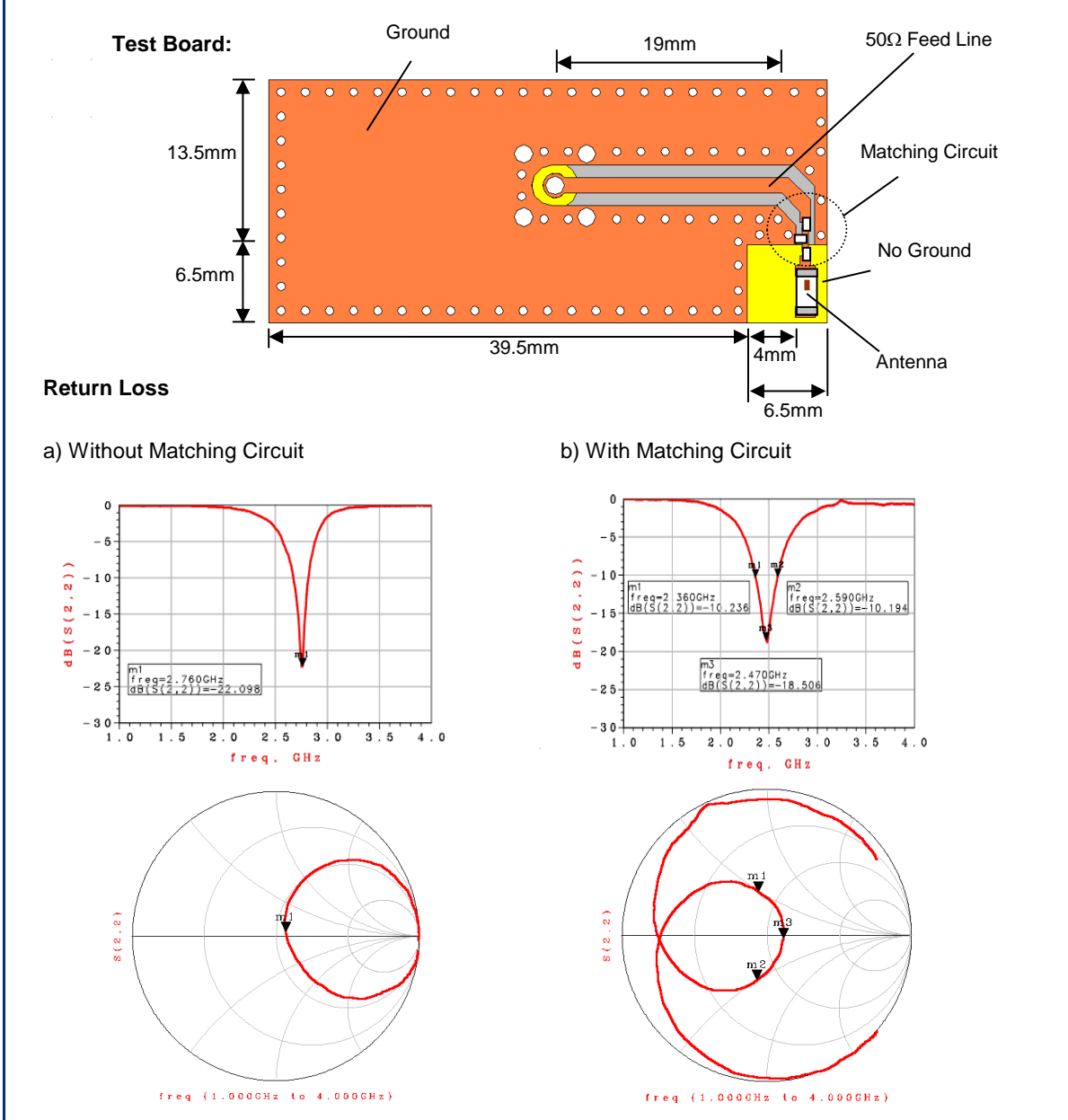
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## Typical Electrical Characteristics (T=25°C)



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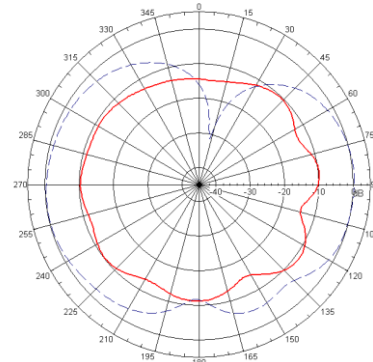
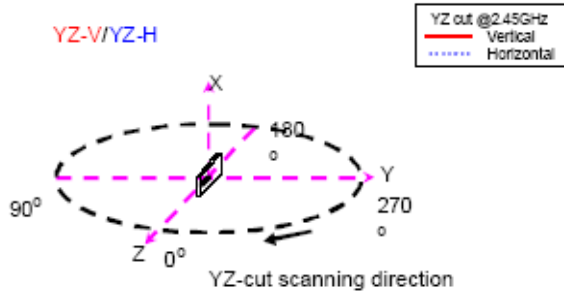
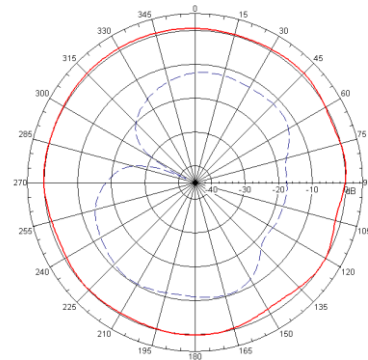
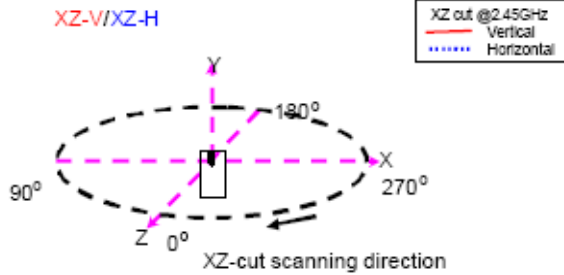
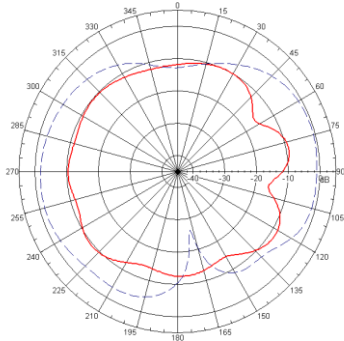
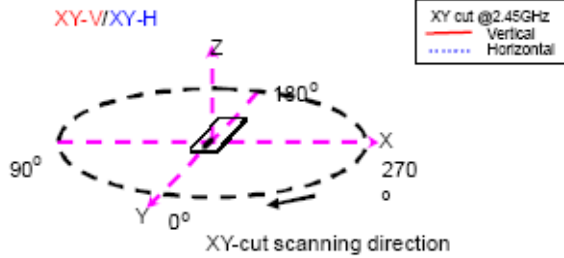
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## Typical Radiation Patterns at 2.45GHz (+25C)



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Would you like Johanson Technology's RF team to help you design and tune our antenna on your board? Click on the link below:

## Antenna layout review, tuning, and characterization services

<http://www.johansontechnology.com/ipc-antenna-services>

## Packaging information

[www.johansontechnology.com/tape-reel-packaging](http://www.johansontechnology.com/tape-reel-packaging)

## Soldering Information

[www.johansontechnology.com/typical-soldering-profile](http://www.johansontechnology.com/typical-soldering-profile)

## RoHS Compliance

[www.johansontechnology.com/rohs-compliance](http://www.johansontechnology.com/rohs-compliance)

## MSL Info

[www.johansontechnology.com/msl-rating.html](http://www.johansontechnology.com/msl-rating.html)

## Recommended Storage Condition and Max Shelf Life

[www.johansontechnology.com/recommended-storage-conditions](http://www.johansontechnology.com/recommended-storage-conditions)

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