

"High Frequency Ceramic Solutions"

2.4GHz Mini Antenna, SMT

P/N 2450AT18A100

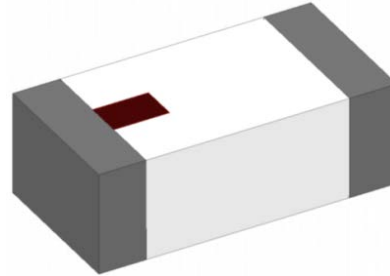
Detail Specification: 7/9/2018

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Let us help you with the antenna design, optimization, and tuning!

General Specifications

Part Number	2450AT18A100		
Frequency (MHz)	2400 - 2500		
Avg. Rad Efficiency*	76%		
Peak Gain (dBi typ.)	0.5		
Average Gain (dBi typ.)	-0.5		
Return Loss (dB)	9.5 min.	Storage Period	18 months max.
		Storage Temperature	-40 to +125°C
Impedance	50 Ω	Operating Temperature	-40 to +125°C
Input Power	2 Watts max. (CW)	Reel Quantity	3000



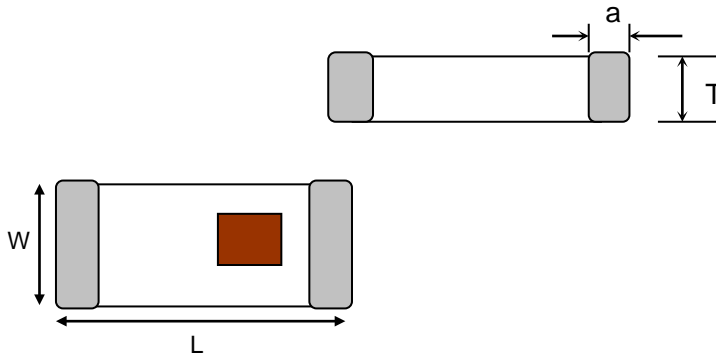
*Efficiency based on Johanson's standard evaluation board

Part Number Explanation

P/N Suffix	Packing Style	Bulk (loose)	Suffix = S	e.g. 2450AT18A100S
		T & R	Suffix = E	e.g. 2450AT18A100E
		100% Tin	Suffix = E or S	e.g. 2450AT18A100(E or S)
	Evaluation Board	2450AT18A100-EBSMA (see page 2&3 for details)		

Mechanical Dimensions

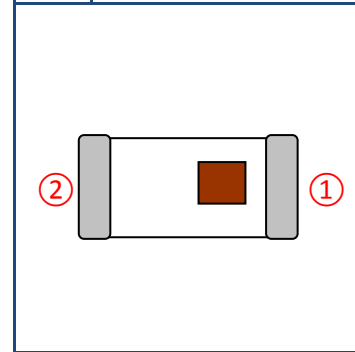
	In	mm
L	0.126 ± 0.008	3.20 ± 0.2
W	0.063 ± 0.008	1.60 ± 0.2
T	0.051 +.004/-.008	1.30 +0.1/-0.2
a	0.020 ± 0.012	0.50 ± 0.3



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Terminal Configuration

No.	Function
1	FEED
2	NC



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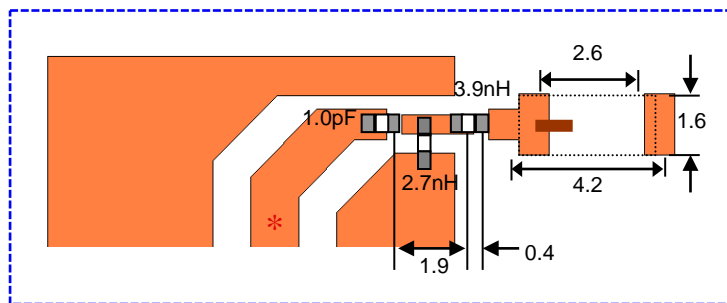
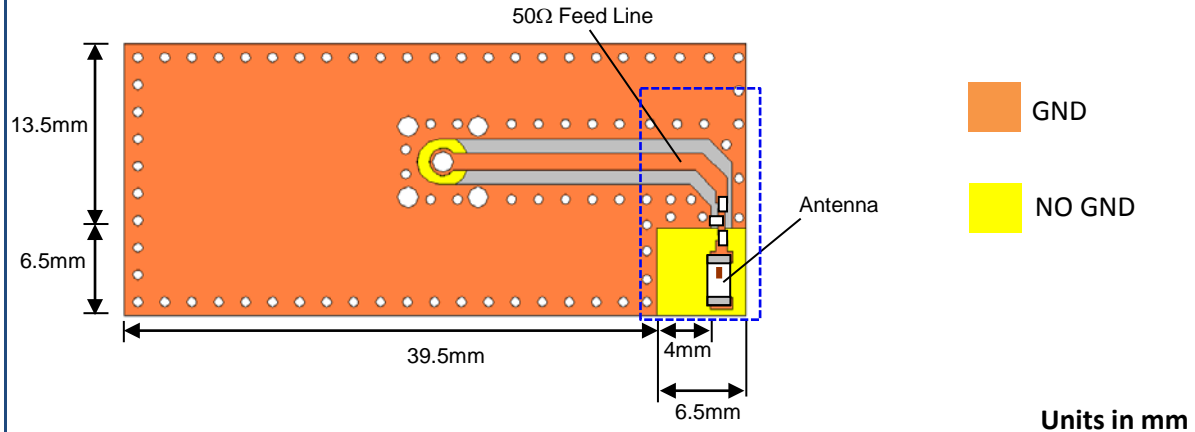
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Mounting Considerations 1: Evaluation Board



JTI P/N for Matching Circuit: Cap
(1.0pF): 500R07S1R0BV4T
Inductor (2.7nH): L-07C2N7SV6T
Inductor (3.9nH): L-07C3N9SV6T

To order a pre-tuned 50Ω EVB with a female SMA connector click
here: www.johansontechnology.com/request-a-sample

Reference p/n: 2450AT18A100-EBSMA

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Ver. 3.0

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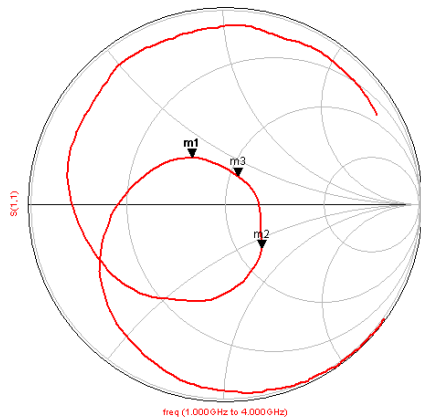
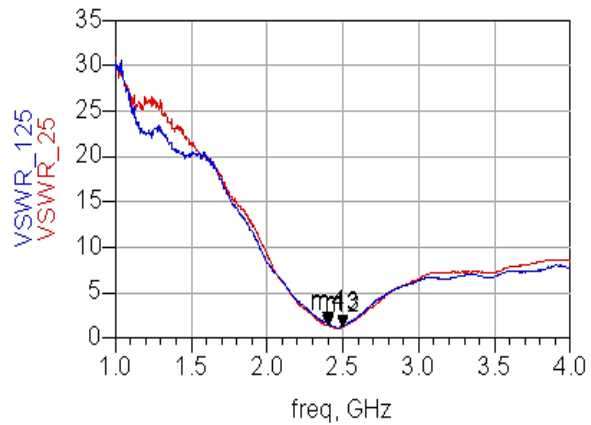
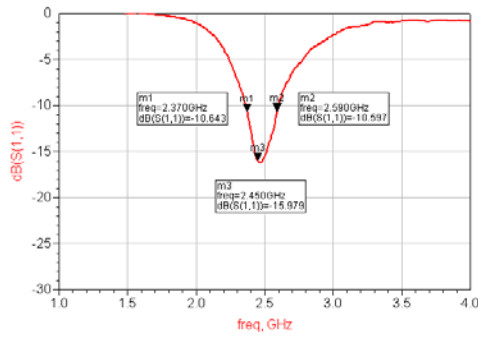
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Mounting Considerations 1: Typical Electrical Performance (T=25°C)

Return Loss with matching circuit @ +25C VSWR with matching circuit @ +25C and +125C



m 1	freq=2.400GHz	VSWR_25=1.386
m 2	freq=2.500GHz	VSWR_25=1.219
m 4	freq=2.400GHz	VSWR_125=1.606
m 3	freq=2.500GHz	VSWR_125=1.332

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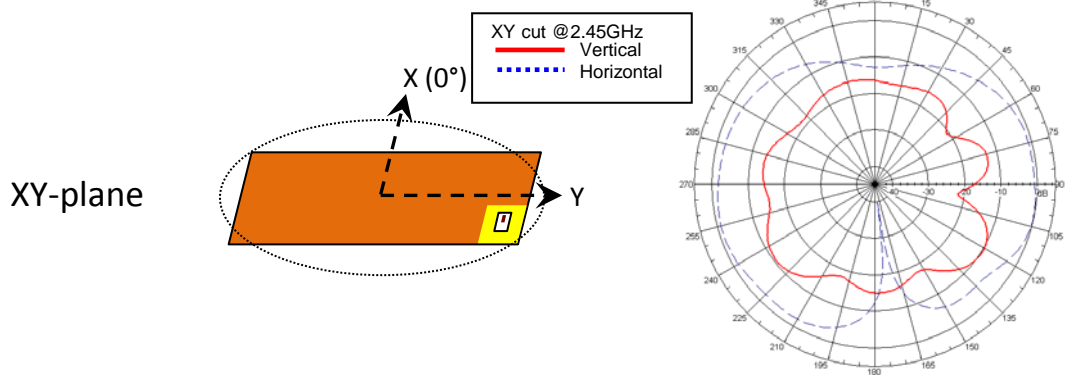
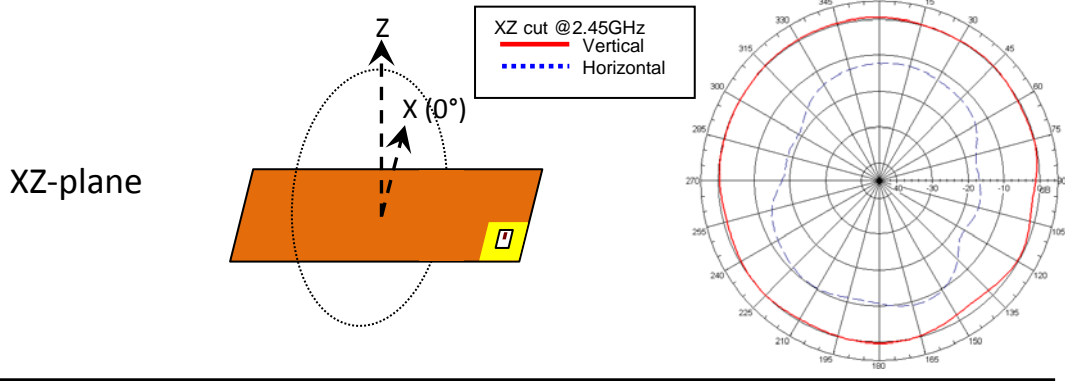
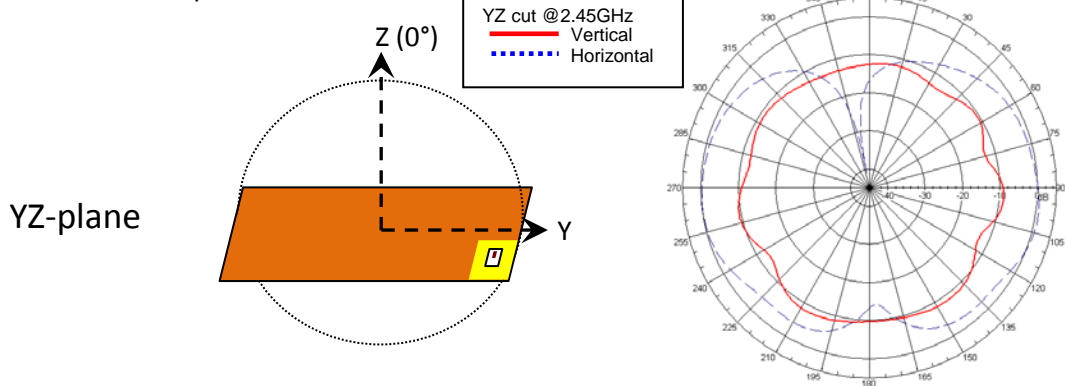
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Mounting Considerations 1: Antenna Performance

Typical 2D radiation patterns @ 2.44GHz



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