



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



"High Frequency Ceramic Solutions"

2.4GHz Mini Antenna, SMT

P/N 2450AT18A100

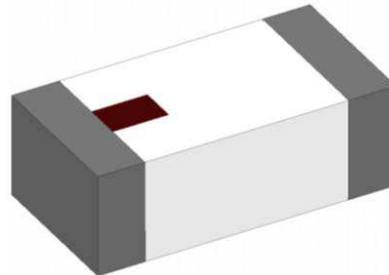
Detail Specification: 7/9/2018

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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



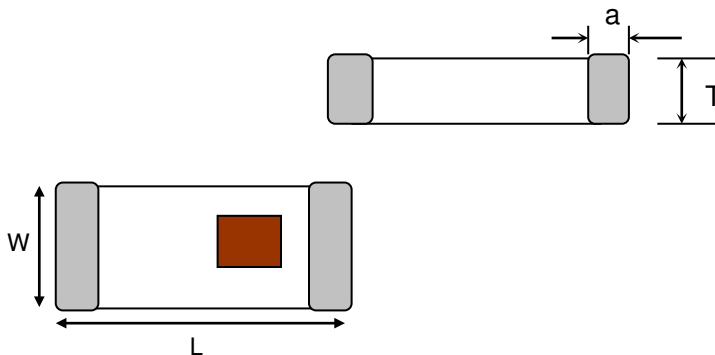
*Efficiency based on Johanson's standard evaluation board

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

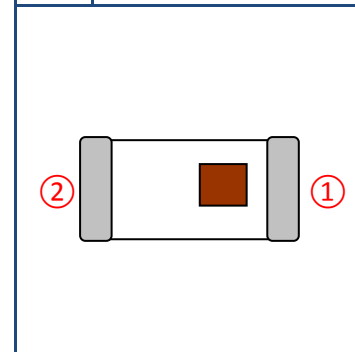
	In	mm
L	0.126 ± 0.008	3.20 ± 0.2
W	0.063 ± 0.008	1.60 ± 0.2
T	0.051 +.004/-.008	1.30 +0.1/-0.2
a	0.020 ± 0.012	0.50 ± 0.3



Want the layout file? Request it at: www.johansontechnology.com/ask-a-question

Terminal Configuration

No.	Function
1	FEED
2	NC



Johanson Technology, Inc. reserves the right to make design changes without notice.
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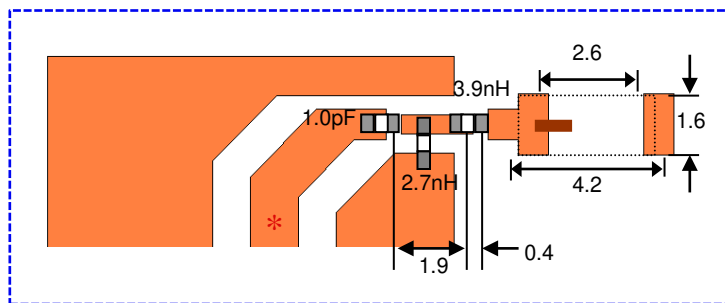
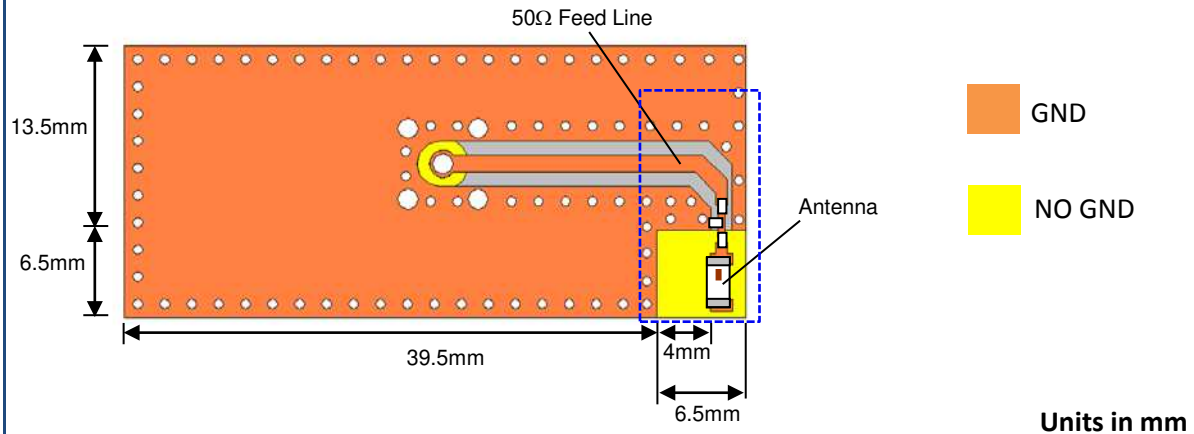
2.4GHz Mini Antenna, SMT

P/N 2450AT18A100

Detail Specification: 7/9/2018

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Mounting Considerations 1: Evaluation Board



JTI P/N for Matching Circuit:

Cap (1.0pF): 500R07S1R02BV4T

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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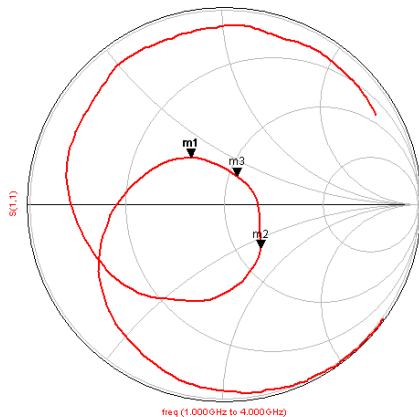
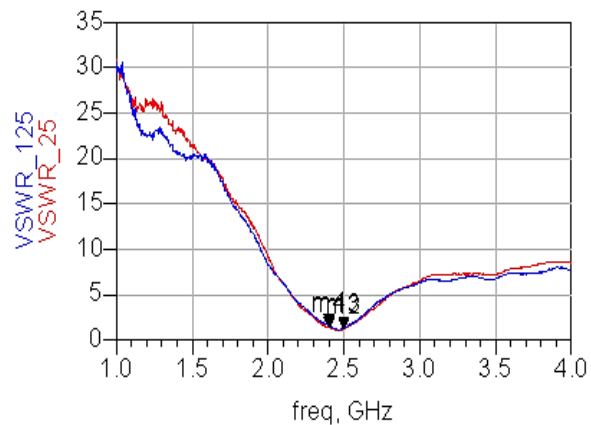
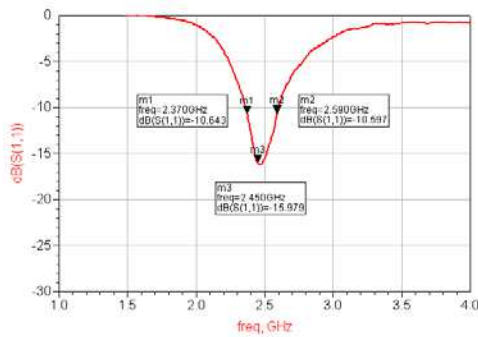
P/N 2450AT18A100

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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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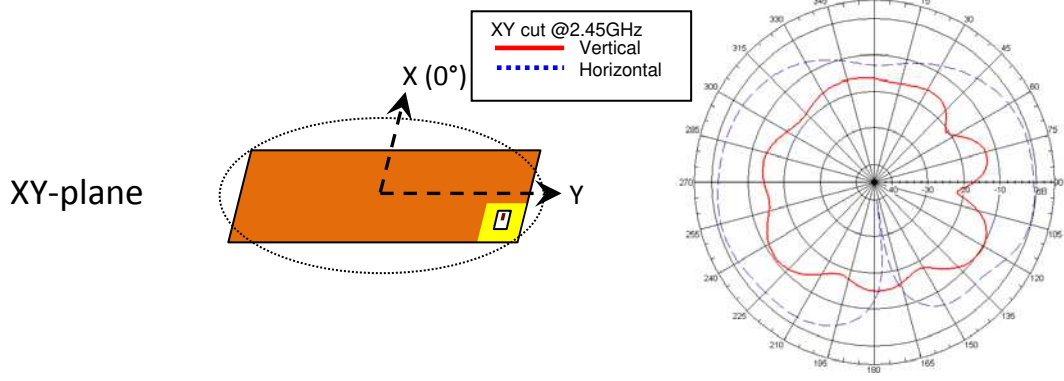
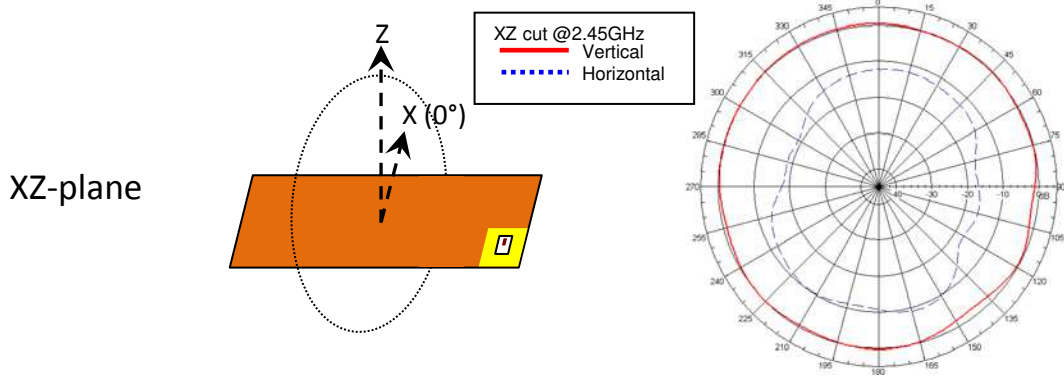
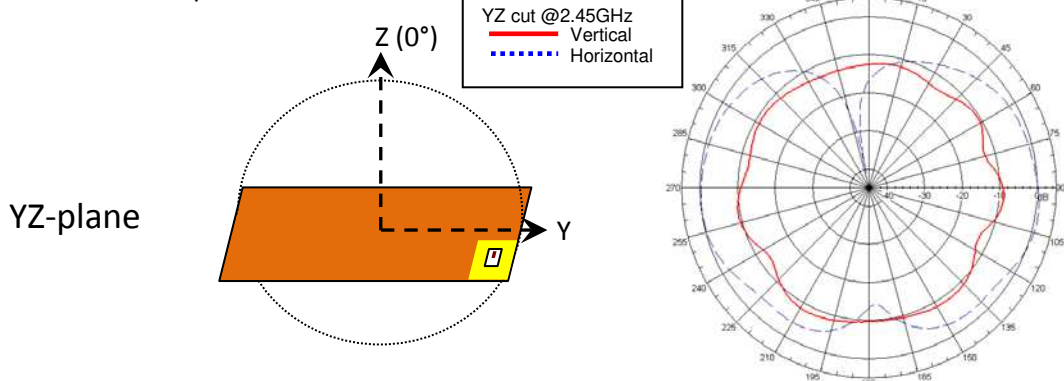
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Mounting Considerations 1: Antenna Performance

Typical 2D radiation patterns @ 2.44GHz



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Antenna tuning, optimization, and validation services:

www.johansontechnology.com/ipc-antenna-services

For more antennas and to download measured S-parameters, go to:

www.johansontechnology.com/antennas

Soldering Information

www.johansontechnology.com/ipcsoldering-profile

MSL Info

www.johansontechnology.com/msl-rating

Packaging information

www.johansontechnology.com/tape-reel-packaging

For layout review contact our Applications Team at:

www.johansontechnology.com/ask-a-question

RoHS Compliance

www.johansontechnology.com/rohs-compliance

Need help designing the antenna in? Use our antenna design services!

www.johansontechnology.com/ipc-antenna-services

We provide 2 free layout reviews and if you need us to tune and characterize the antenna on your product (inside anechoic chamber) we can do that too. Small lab fee may apply for the latter.

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