

**LEVITON PART NUMBER (Global)**

0XA9935890000


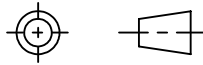
MANUFACTURER NAME	MANUFACTURER PART NUMBER
JOHANSON	2450AT18B100E


**NOTES:**

1. SINGLE SOURCE: ALL ALTERNATES MUST HAVE ENGINEERING APPROVAL
2. SEE FOLLOWING PAGES FOR PURCHASING INFO FROM DATA SHEET
3. ITEM MUST BE ROHS COMPLIANT

MANUFACTURING PART NUMBER EXPLANATION:  
SEE MANUFACTURER DATA SHEET FOR DETAILS

**NOTE: As of 09/23/2013 all new parts created to unified P/N system**

STATUS: Production Release	REV.	DATE	ECO NUMBER	CHGD	APVD					
	A	01/26/2015	0000000	NRD	RY7					
	-	-	-	-	-					
	-	-	-	-	-					
	-	-	-	-	-					
	-	-	-	-	-					
			UNLESS OTHERWISE SPECIFIED: DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN INCHES. ALL ANGLES ARE IN DEGREES.							
	<p>The information in this document is the exclusive <b>PROPRIETARY</b> property of <b>LEVITON MFG. CO., INC.</b> It is disclosed with the understanding that acceptance or review by the recipient constitutes an undertaking by the recipient:</p> <p>(1) to hold this information in strict confidence.</p> <p>(2) not to disclose, duplicate, copy, or use the information, in whole or in part, for any purpose other than that for which disclosed.</p> <p>Copyright 2009. Unpublished. All Rights Reserved.</p>		TOLERANCES		TITLE: <b>ANTENNA CHIP 2.45GHz SMT</b>					
			INCH	METRIC	DWN BY	NRD	01/26/2015	ENGRG	RY7	01/26/2015
			.XX ± .01 .XXX ± .005	.X ± .2 mm .XX ± .1 mm	CHK BY	RY7	01/26/2015	MFG	RY7	01/26/2015
ANGLES: ± 1/2°			DWG NO. <b>OXA9935-D01</b>							
THIRD ANGLE PROJECTION 		SIZE <b>A</b>		PROJECT NO. 02636			REV <b>A</b>			
ALL PRINTED COPIES ARE UNCONTROLLED		SCALE:1:1			SHEET 1 OF 4					



# "High Frequency Ceramic Solutions"

## 2450 MHz Antenna

Detail Specification: 08/10/09

P/N 2450AT18B100

Page 1 of 3

### General Specifications

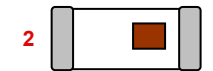
Part Number	2450AT18B100
Frequency Range	2400 - 2500 Mhz
Peak Gain	0.5 dBi typ. (XZ-V)
Average Gain	-0.5 dBi typ. (XZ-V)
Return Loss	9.5 dB min.

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

P/N 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	

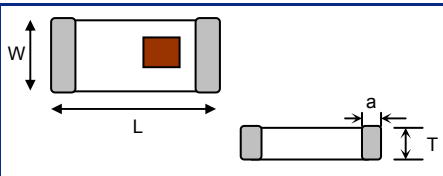
### Terminal Configuration

No.	Function
1	Feeding Point
2	NC



### Mechanical Dimensions

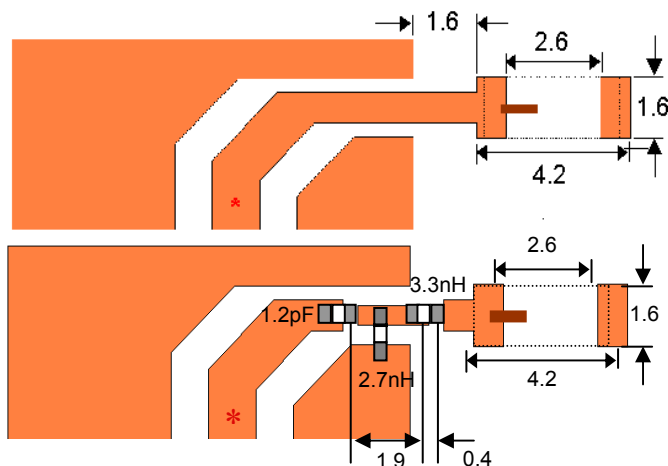
	In	mm
L	0.126 $\pm$ 0.008	3.20 $\pm$ 0.20
W	0.063 $\pm$ 0.008	1.60 $\pm$ 0.20
T	0.051 $\pm$ 0.004/-0.008	1.30 $\pm$ 0.1/-0.2
a	0.020 $\pm$ 0.012	0.50 $\pm$ 0.30



### 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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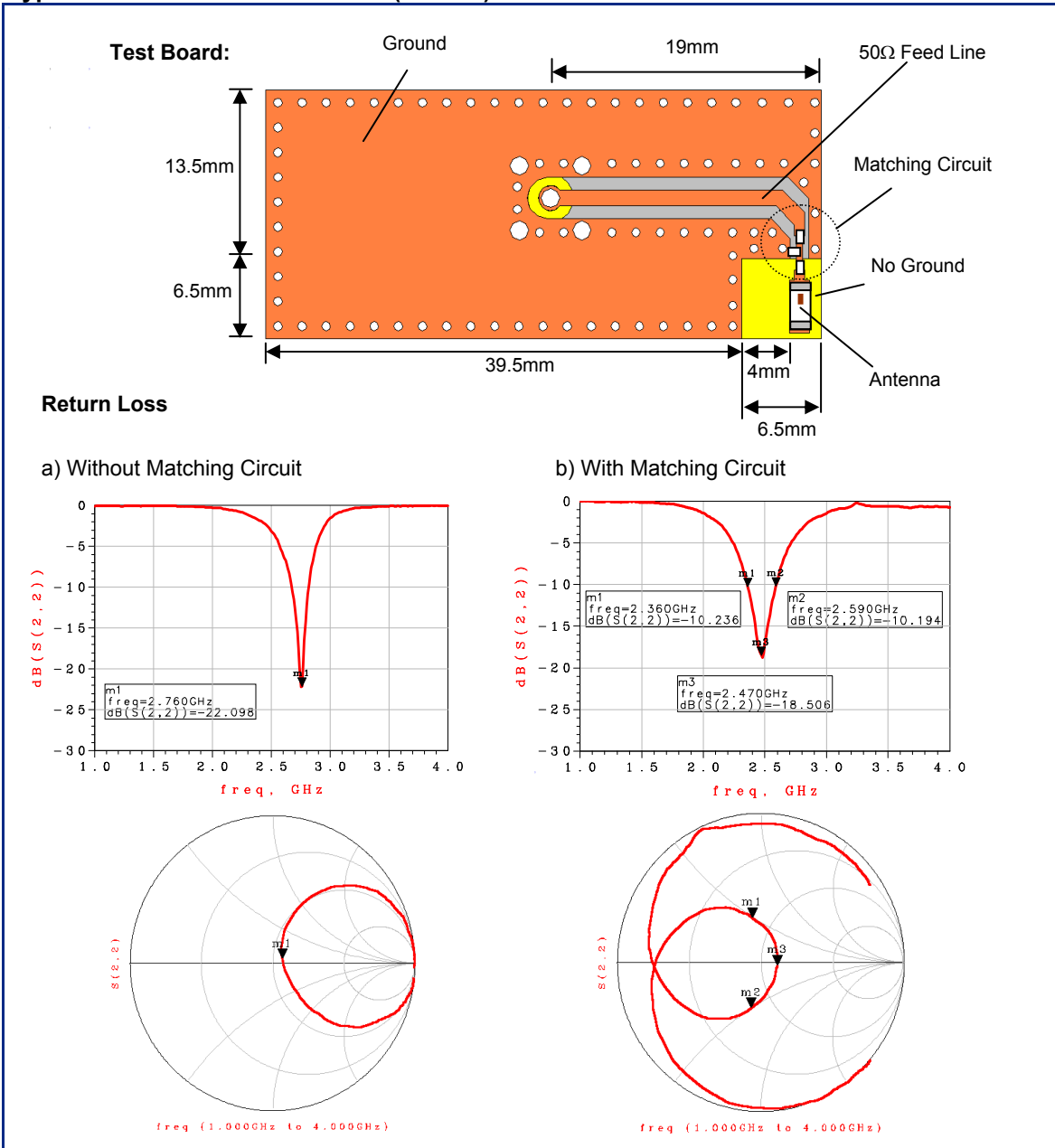
**2450 MHz Antenna**

Detail Specification: 08/10/09

**P/N 2450AT18B100**

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



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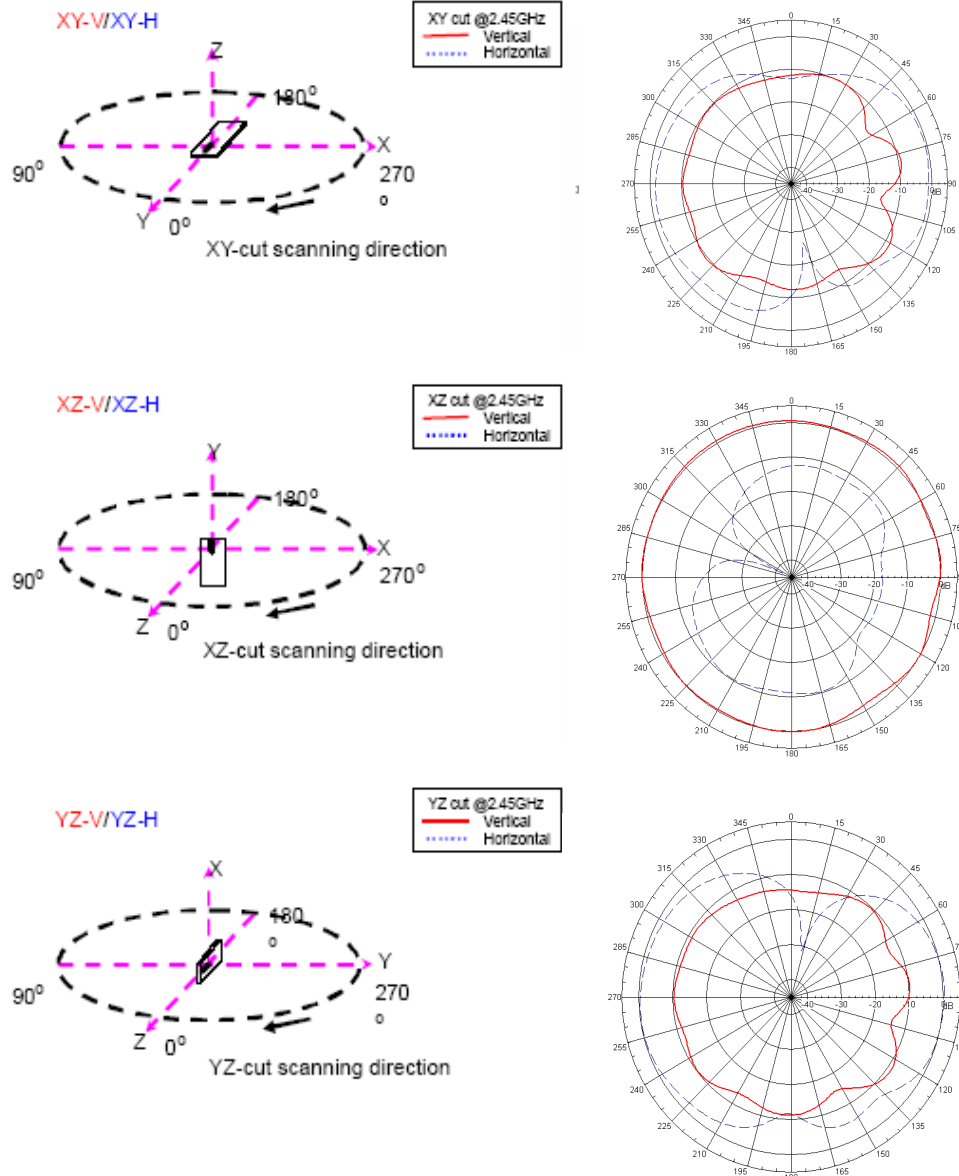
## 2450 MHz Antenna

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### Typical Radiation Patterns



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