

Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Johanson Technology Inc.](#)
[2450AT43B100E](#)

For any questions, you can email us directly:

sales@integrated-circuit.com

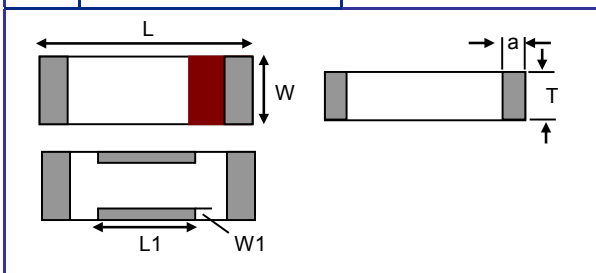
"High Frequency Ceramic Solutions"

2.4 GHz WLAN, Home RF, Bluetooth Antenna, 802.11 b/g P/N 2450AT43B100
With Ground Clearance Requirements Minimized
 Detail Specification: 1/29/2013 Page 1 of 4

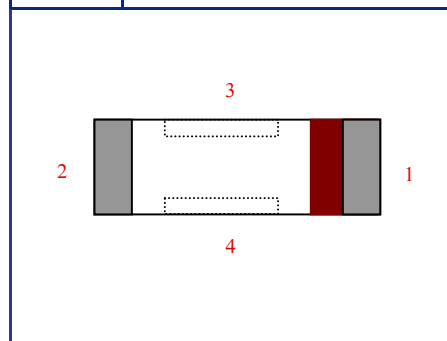
General Specifications			
Part Number	2450AT43B100	Input Power	2W max.
Frequency Range	2400 - 2500 Mhz	Impedance	50 Ω
Peak Gain	1.3 dBi typ. (XZ-V)	Reel Quantity	1,000
Average Gain	-0.5 dBi typ. (XZ-V)	Operating Temperature	-40 to +85°C
Return Loss	9.5 dB min.	Recommended Storage Conditions (for unused product on T&R)	+5 to +35°C, Humidity: 45-75%RH, 18 mos. Max

Part Number Explanation			
P/N Suffix	Packaging Style	Bulk	Suffix = S Eg. 2450AT43B100S
		T & R	Suffix = E Eg. 2450AT43B100E
	Termination Style	100% Tin	Suffix = None Eg. 2450AT43B100(E or S)
		Tin / Lead	Please consult Factory
Evalaution Board	2450AT43B100-EB1SMA (comes with SMA connector)		

Mechanical Dimensions		
	In	mm
L	0.276 ± 0.008	7.00 ± 0.20
W	0.079 ± 0.008	2.00 ± 0.20
L1	0.102 ± 0.008	2.60 ± 0.20
W1	0.020 ± 0.008	0.50 ± 0.20
T	0.079 +.004/- .008	2.00 +0.1/-0.2
a	0.020 ± 0.012	0.50 ± 0.30



Terminal Configuration	
No.	Function
1	Feed Point
2	NC
3	NC
4	NC



Johanson Technology, Inc. reserves the right to make design changes without notice.
 All sales are subject to Johanson Technology, Inc. terms and conditions.

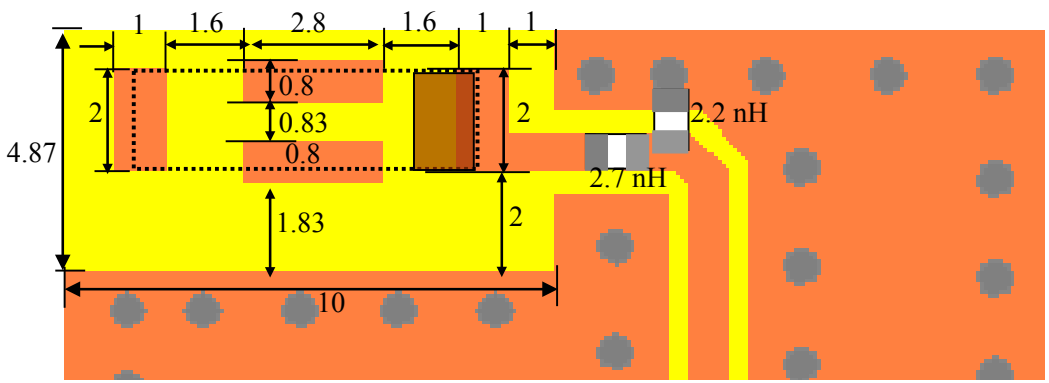
"High Frequency Ceramic Solutions"

2.4 GHz WLAN, Home RF, Bluetooth Antenna, 802.11 b/g **P/N 2450AT43B100**
 With Ground Clearance Requirements Minimized Page 2 of 4
 Detail Specification: 1/29/2013

Mounting and Layout Guidelines:

Mount these devices with brown mark facing up. Units: mm
 * Antenna feed line width should be designed to provide 50 Ω impedance otherwise improper operation will occur
Note 1: Pins 3 & 4, although "NC", must be soldered to its PCB pads for proper electrical operation

With Matching Circuits



JTI P/N for Matching Circuit:
 Inductor (2.2nH): L-07C2N2SV6T
 Inductor (2.7nH): L-07C2N7SV6T

(Matching circuit and component values will be different, depending on PCB layout)

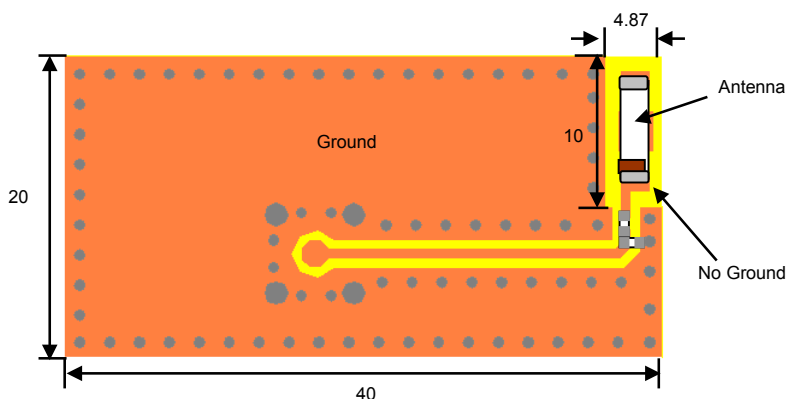
Note 2: It is recommended that the designer leave available slots for a "pi" (or shunt-series-shunt) network. The antenna matching network values above are used when antenna is mounted on Johanson's evaluation board. The matching values on client's PCB will be different. Go to: <http://johansontechnology.com/tuning> and see how to obtain the new values. If you need further help, contact our RF Applications Eng Team at: <http://www.johansontechnology.com/en/ask-a-technical-question.html>

"High Frequency Ceramic Solutions"

2.4 GHz WLAN, Home RF, Bluetooth Antenna, 802.11 b/g **P/N 2450AT43B100**
 With Ground Clearance Requirements Minimized Page 3 of 4
 Detail Specification: 1/29/2013

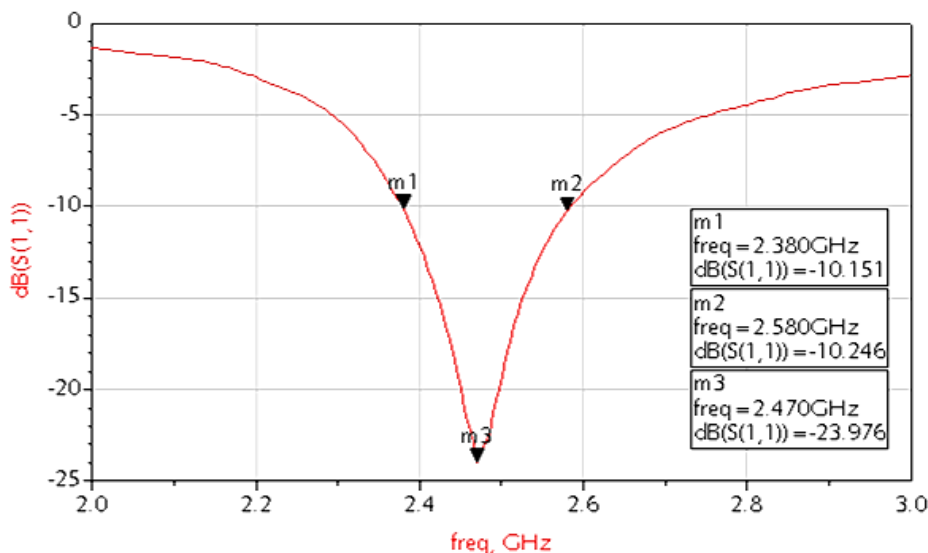
Typical Electrical Characteristics (T=25°C)

Test Board used orderable p/n: 2450AT43B100-EB1SMA (comes with SMA connector)



Return Loss

With Matching Circuit

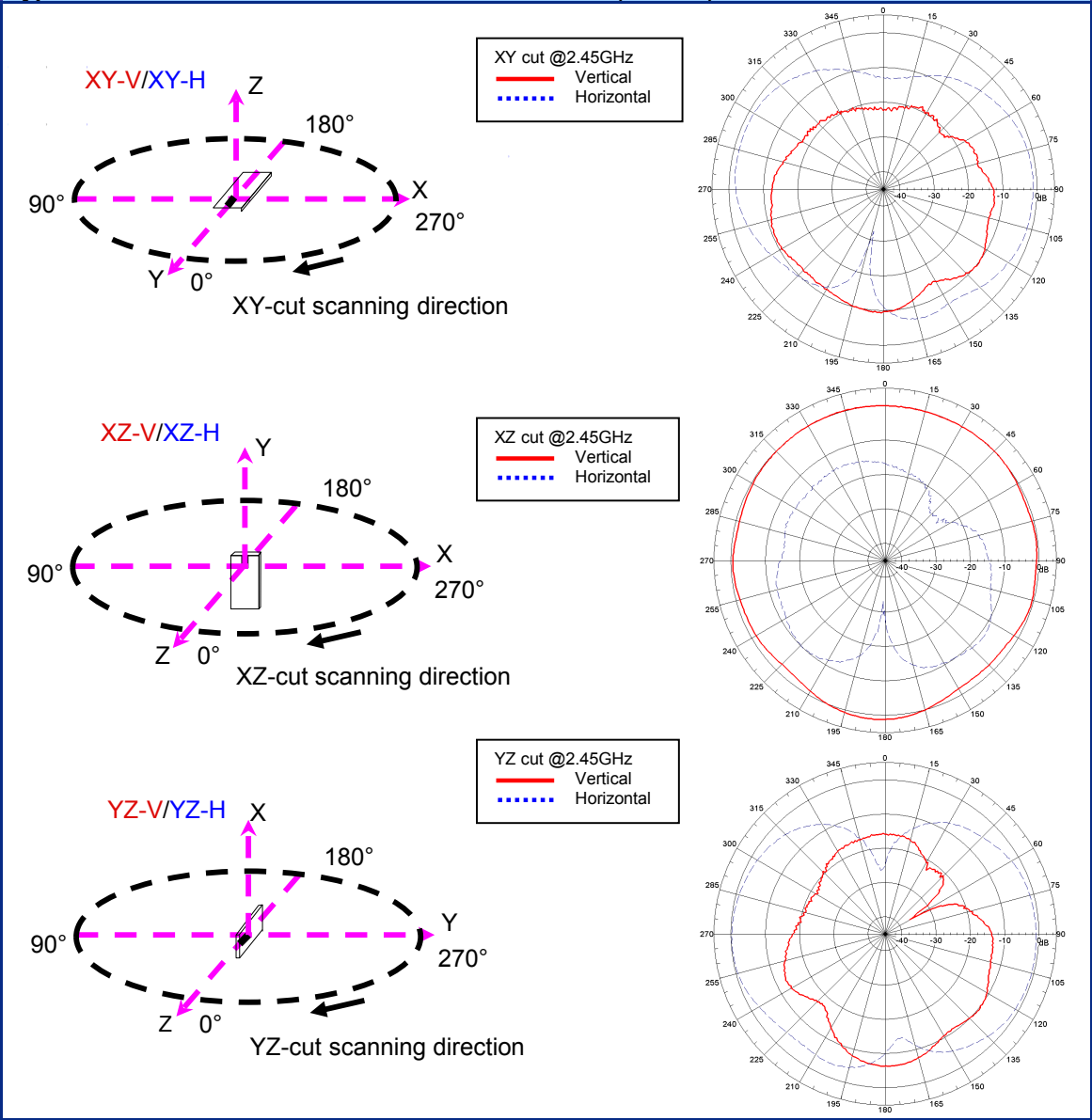


Johanson Technology, Inc. reserves the right to make design changes without notice.
 All sales are subject to Johanson Technology, Inc. terms and conditions.

"High Frequency Ceramic Solutions"

2.4 GHz WLAN, Home RF, Bluetooth Antenna, 802.11 b/g **P/N 2450AT43B100**
 With Ground Clearance Requirements Minimized Page 4 of 4
 Detail Specification: 1/29/2013

Typical Electrical Characteristics/Radiation Patterns (T=25°C)



Johanson Technology, Inc. reserves the right to make design changes without notice.
 All sales are subject to Johanson Technology, Inc. terms and conditions.