

"High Frequency Ceramic Solutions"

2.4 GHz WLAN, Home RF, Bluetooth Antenna

P/N 2450AT43B100

NEW with Ground Clearance Requirements Minimized

Detail Specification: 09/04/08

Page 1 of 4

General Specifications

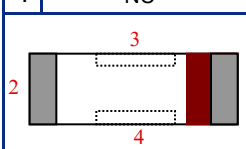
Part Number	2450AT43B100
Frequency Range	2400 - 2500 Mhz
Peak Gain	1.3 dBi typ. (XZ-V)
Average Gain	-0.5 dBi typ. (XZ-V)
Return Loss	9.5 dB min.

Input Power	2W max.
Impedance	50 Ω
Reel Quantity	1,000
Operating Temperature	-40 to +85°C
Storage Temperature	+5 to +35°C, Humidity: 45-75%RH, 12 mos. Max

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	

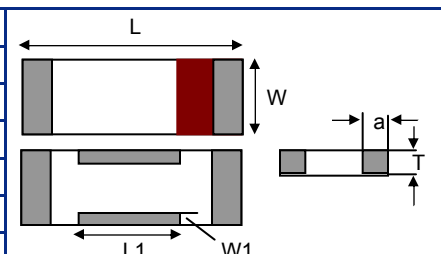
Terminal Configuration

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



Mechanical Dimensions

	In	mm
L	0.276 $\pm$ 0.008	7.00 $\pm$ 0.20
W	0.079 $\pm$ 0.008	2.00 $\pm$ 0.20
L1	0.102 $\pm$ 0.008	2.60 $\pm$ 0.20
W1	0.020 $\pm$ 0.008	0.50 $\pm$ 0.20
T	0.079 +.004/-0.008	2.00 +0.1/-0.2
a	0.020 $\pm$ 0.012	0.50 $\pm$ 0.30



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Page 2 of 4

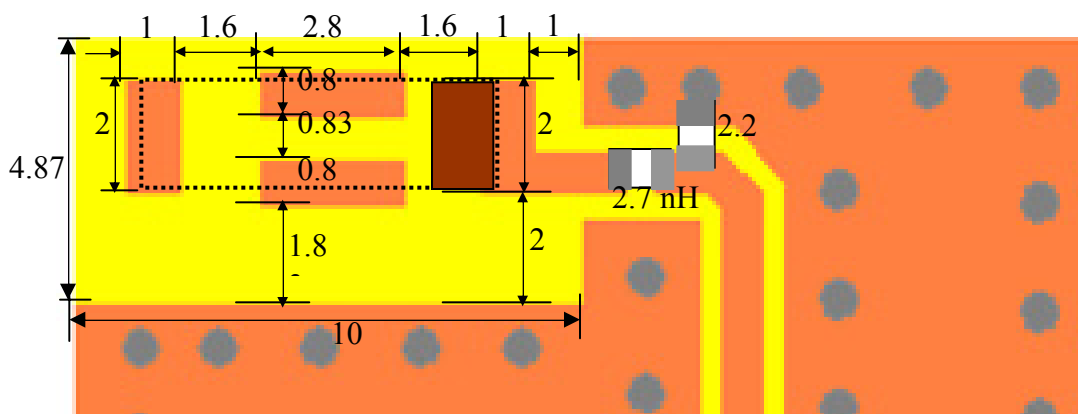
Mounting Considerations

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

Line width should be designed to provide 50Ω impedance matching characteristics.

* Note: Pins 3 & 4, although "NC", must be soldered to its PCB pads for proper electrical operation

With Matching Circuits



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

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

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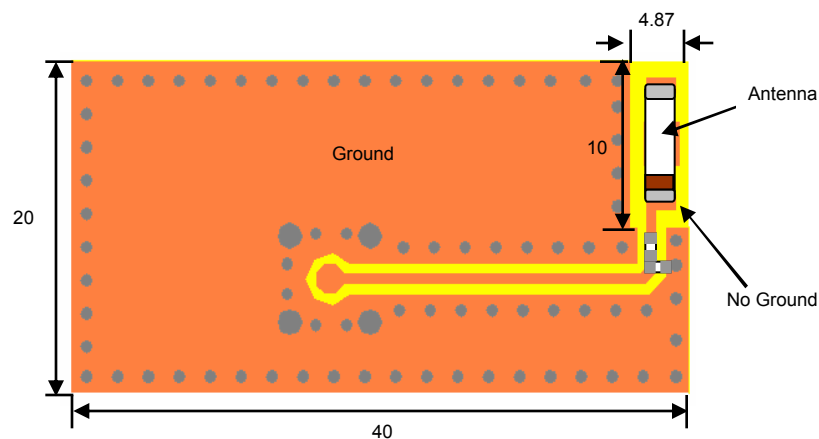
P/N 2450AT43B100

Detail Specification: 09/04/08

Page 3 of 4

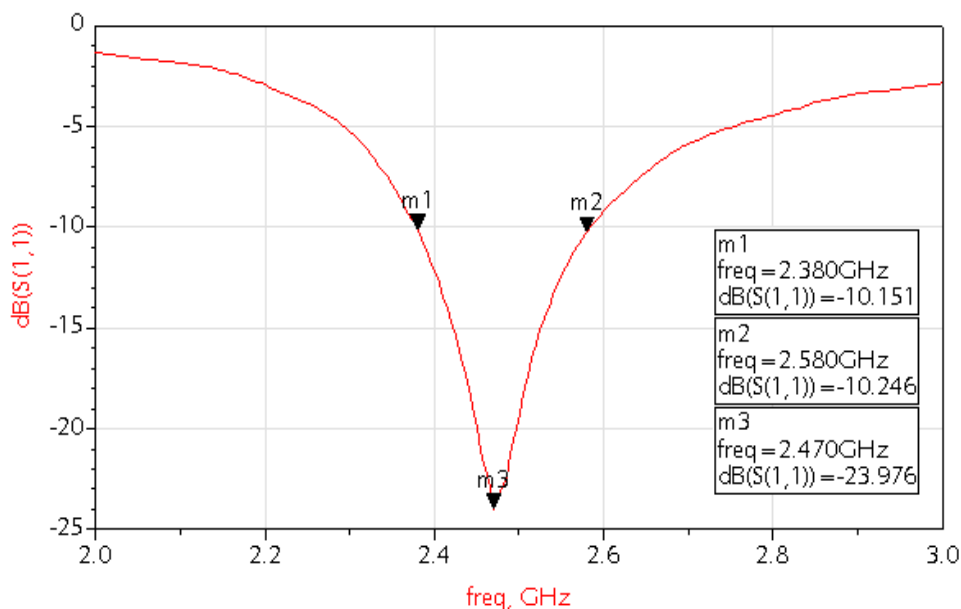
Typical Electrical Characteristics (T=25°C)

Test Board:



Return Loss

With Matching Circuit



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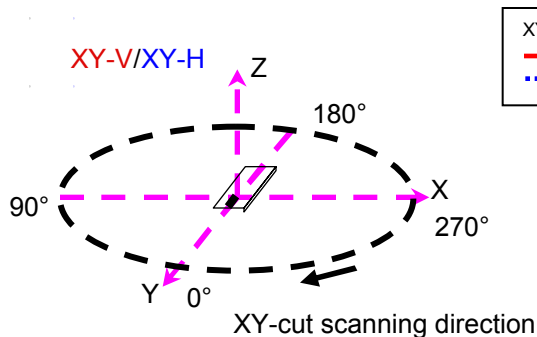
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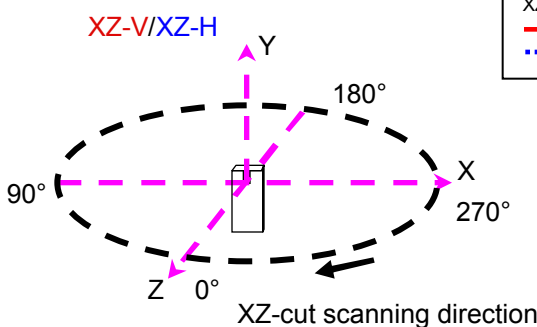
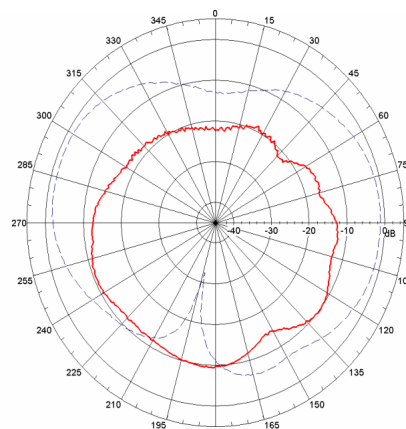
Detail Specification: 09/04/08

Page 4 of 4

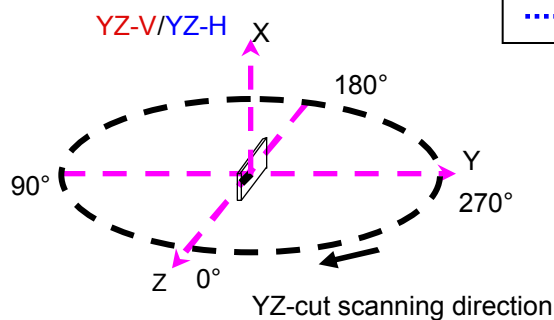
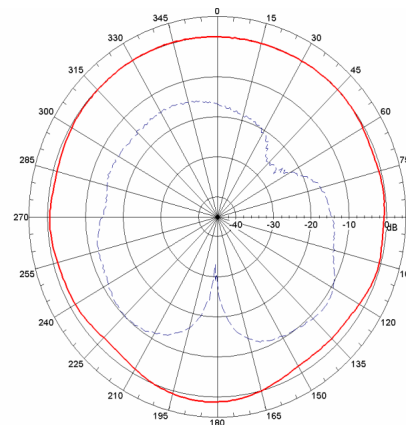
Typical Radiation Patterns



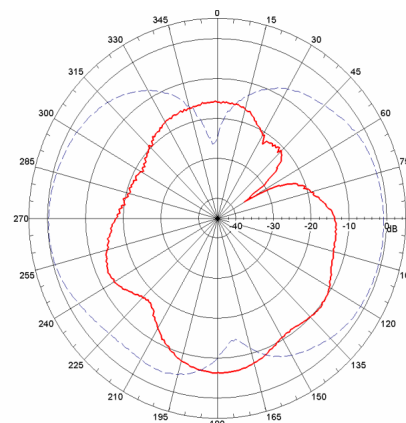
XY cut @2.45GHz
— Vertical
- - - Horizontal



XZ cut @2.45GHz
— Vertical
- - - Horizontal



YZ cut @2.45GHz
— Vertical
- - - Horizontal



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