

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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# **2.45 GHz wide band, small form factor SMD chip antenna**Detail Specification: 4/22/2016 Page 1 of 5

General Specifications					
Part Number	2450AT43F0100	Reel Quanity	2,000 pcs		
Operating Frequency (MHz)	2400 - 2500 Mhz	Operating Temperature	-40 to +85°C		
Peak Gain (XZ-total)	2.1 dBi typ.	Recommended Storage	+5 ∼ +35 °C, Humidity		
Average Gain (XZ-total)	1.0 dBi typ.	Conditions	45~75%RH 12 months		
Impedance	50 Ω	Power Capacity	2W max. (CW)		

Part Number Explanation						
P/N Suffix	Packing Style	Bulk	Suffix = S	eg. 2450AT43F0100S		
		T&R	Suffix = E	eg. 2450AT43F0100E		
		100% Tin	Suffix = E or S	eg. 2450AT43F0100 (E or S)		
	<b>Evaluation Board</b>	Bulk	2450AT43F0100-EB1SMA (with female SMA connector)			

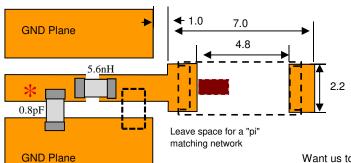
Mechanical Dimensions				
	ln	mm		
L	0.236 ± 0.008	6.00 ± 0.20		
W	0.079 ± 0.008	2.00 ± 0.20		
Т	0.047 0.2 +.004 /008	1.20 + 0.1 / -0.2		
а	0.020 ± 0.012	0.50 ± 0.30		
	w	→ a ← ⊤		

Terminal Configuration					
No.	Function				
1	Feeding Point				
2	NC				
	1		2		

### **Mounting Considerations**

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

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



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: www.johansontechnology.com/tuning.html and see how to obtain the new values.

Want us to do the tuning and characterization for you? Go to:

www.johansontechnology.com/ipc-antenna-services

Want the layout file of the above? Send us a message at: www.johansontechnology.com/ask-a-question



### 2.45 GHz wide band, small form factor SMD chip antenna

P/N 2450AT43F0100

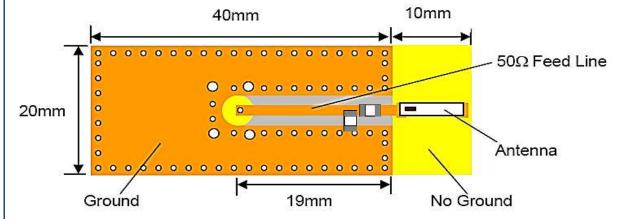
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### **Mounting Considerations**

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

\*Line width should be designed to provide 50  $\Omega$  impedance matching characteristics.

#### With Matching Circuit



Want the layout file of the above? Send us a message at: www.johansontechnology.com/ask-a-question

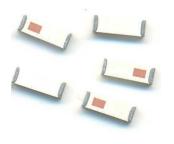
To order the EVB above for preliminary testing free (pre-tuned  $50\Omega$  EVB with a female SMA connector) Click here:

www.johansontechnology.com/request-a-sample

Reference p/n: 2450AT43F0100-EB1SMA

We offer 2 free layout reviews as well as antenna tuning and characterization services (lab fee may apply). Go to:

www.johansontechnology.com/ipc-antenna-services



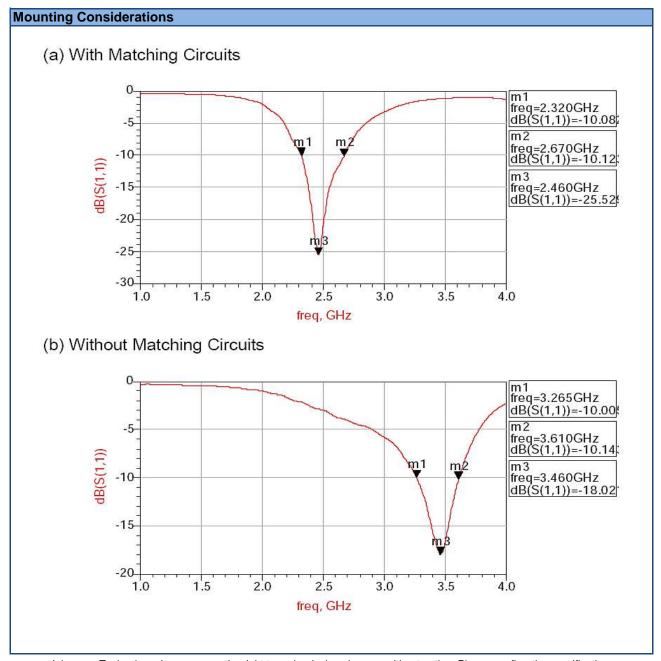
Johanson Technology, Inc. reserves the right to make design changes without notice. Please confirm the specifications and delivery conditions when placing your order. All sales are subject to Johanson Technology, Inc. terms and conditions.



### 2.45 GHz wide band, small form factor SMD chip antenna

P/N 2450AT43F0100

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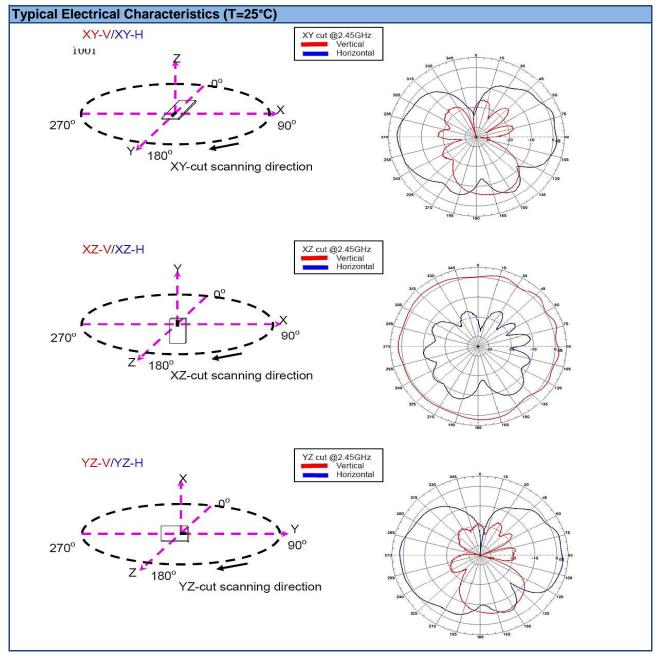
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2.45 GHz wide band, small form factor SMD chip antenna

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More SMD Chip Antennas at:

www.johansontechnology.com/antennas

**Packaging information** 

www.johansontechnology.com/tape-reel-packaging

**Soldering Information** 

www.johansontechnology.com/ipcsoldering-profile

Antenna layout and tuning techniques (How to obtain the new antenna matching values)

www.johansontechnology.com/tuning.html

Antenna layout review, tuning, and characterization services

http://www.johansontechnology.com/ipc-antenna-services

**RoHS Compliance** 

www.johansontechnology.com/rohs-compliance

**MSL Info** 

http://www.johansontechnology.com/msl-rating

P/N Explanation and Breakdown

www.johansontechnology.com/ipc-pn-explained

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