"High Frequency Ceramic Solutions"

2.5GHz Chip Antenna with No GND clearance required

P/N 2500AT43A0100

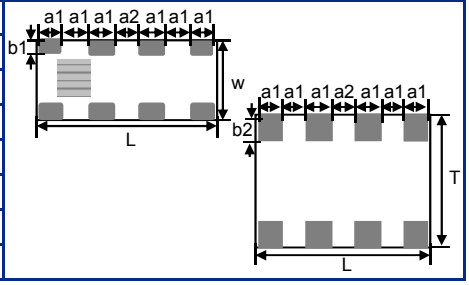
Detail Specification: 10/28/2013

General Specifications

Part Number	2500AT43A0100	**Input Power**	2W max. (CW)
Frequency Range	2450 - 2550	**Operating Temperature**	-40 to +85°C
Peak Gain	0.6 dBi typ. (YZ-total)	**Recommended Storage Conditions**	+5~+35°C, Humidity 45~75%RH
Average Gain	-2.1 dBi typ. (XZ-total)		
VSWR	3.0 max.	**Reel Quanity**	500pcs
Impedance	50 Ω		

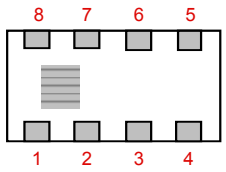
Mechanical Dimensions

	In	mm
L	0.276 ± 0.008	7.00 ± 0.20
W	0.079 ± 0.008	2.00 ± 0.20
T	0.157 ± 0.008	4.00 ± 0.20
a1	0.033 ± 0.008	0.85 ± 0.20
a2	0.039 ± 0.008	1.00 ± 0.20
b1	0.020 ± 0.008	0.50 ± 0.20
b2	0.039 ± 0.008	1.00 ± 0.20

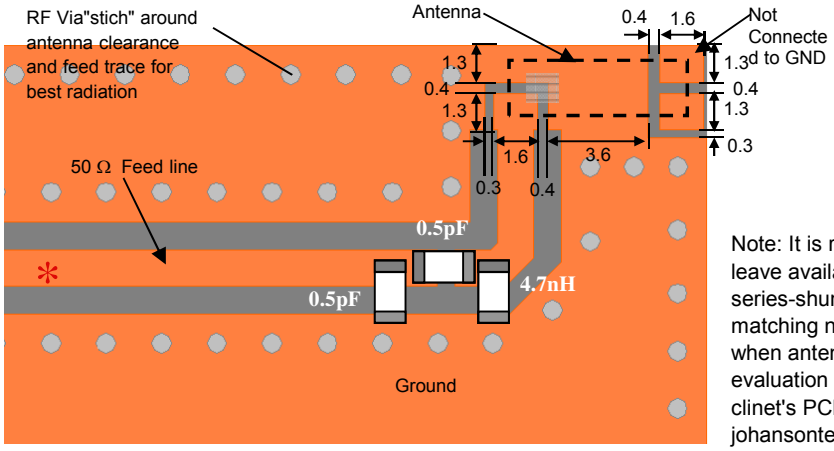


Terminal Configuration

No.	Function
1	Feeding Point
2	GND
3	GND
4	NC
5	NC
6	GND
7	GND
8	GND



Mounting Considerations



* Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness

We peform layout review as well as antenna tuning and characterization services. Go to page 2 for details.

Units in mm

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

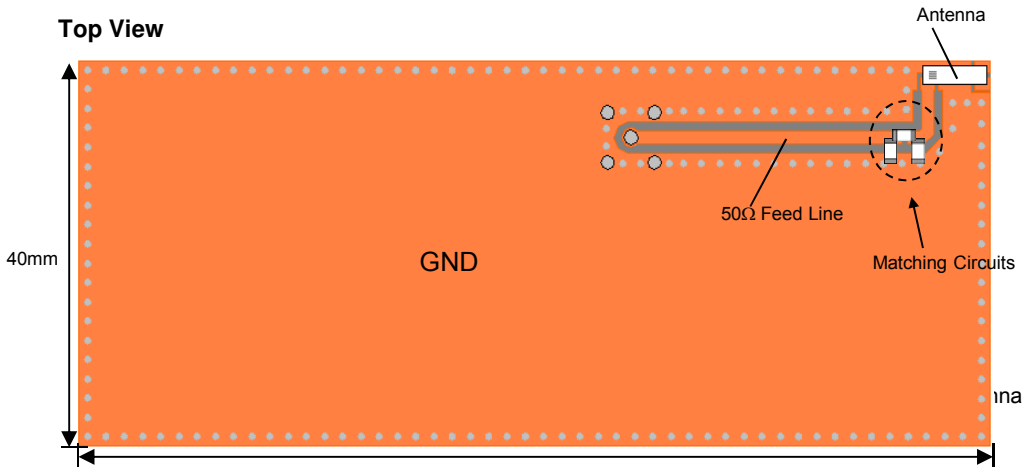
JOHANSON TECHNOLOGY

www.johansontechnology.com

4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

Johanson Evaluation Board (orderable item)

Top View

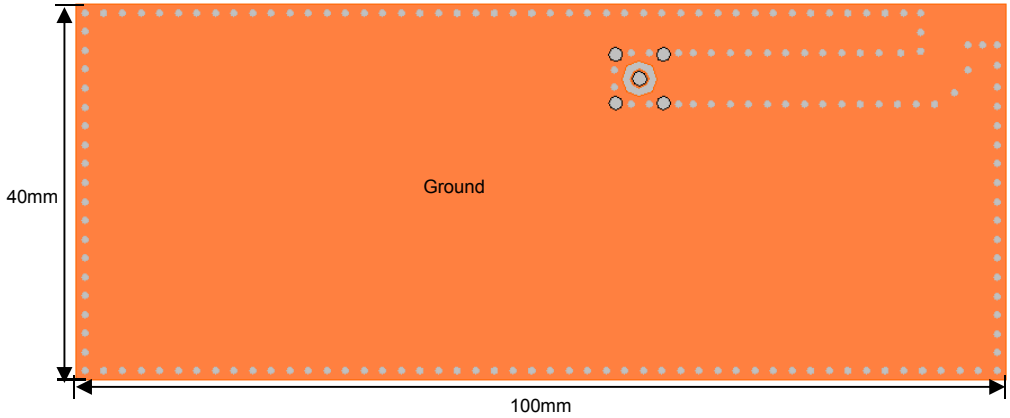


Test Board:
P/N: 2500AT43A0100-EB1SMA
(orderable item)

To order, go to:
www.johansontechnology.com/samplerequest

We offer antenna layout review, tuning, and characterization services, go to:
www.johansontechnology.com/ipcantennaservices for details and instructions

Bottom View



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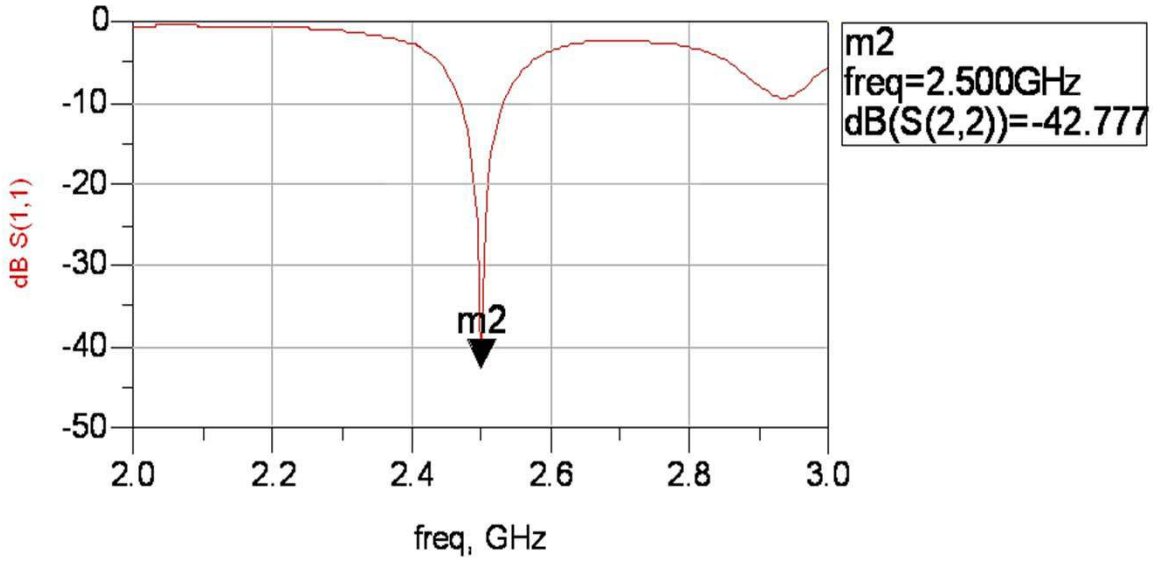
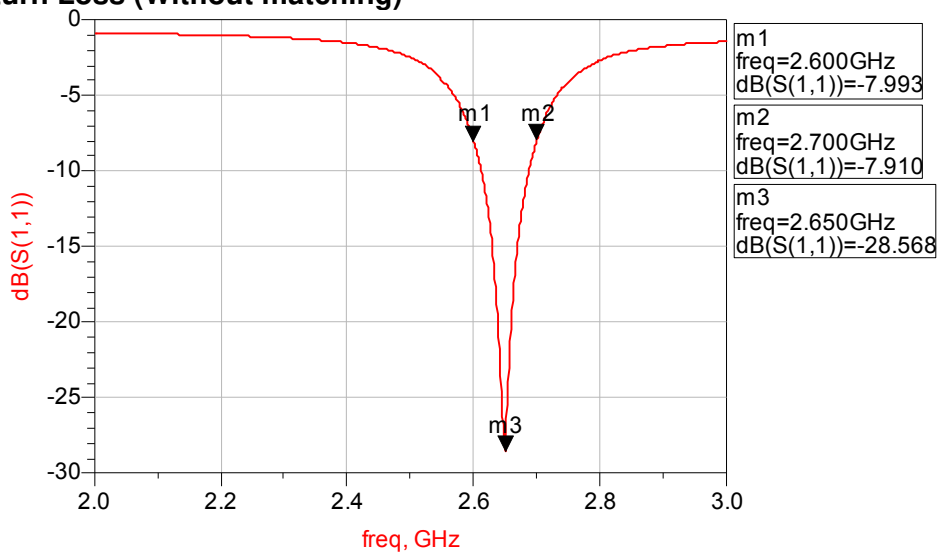
Typical Electrical Characteristics (T=25oC)

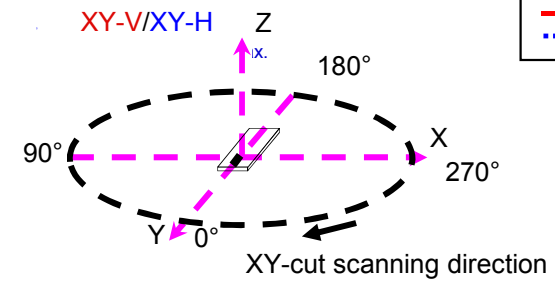
Return Loss (With matching)

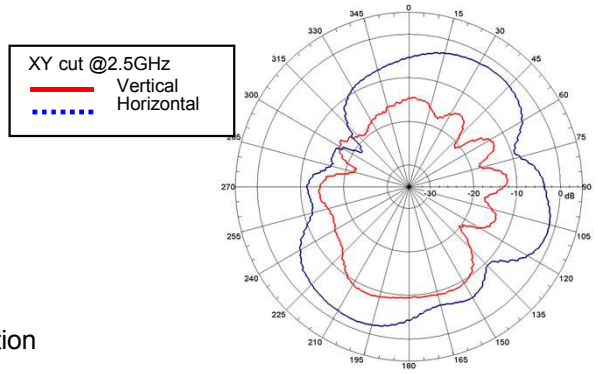


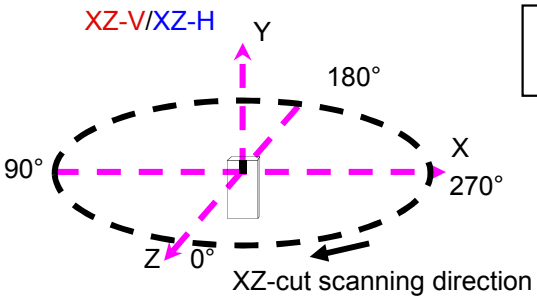
Return Loss (Without matching)

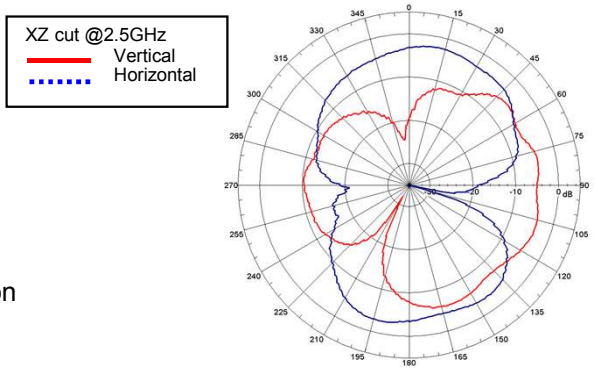


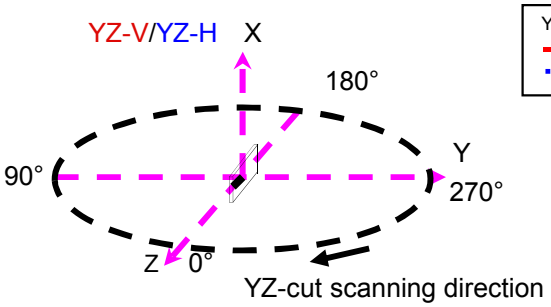
Typical Radiation Patterns

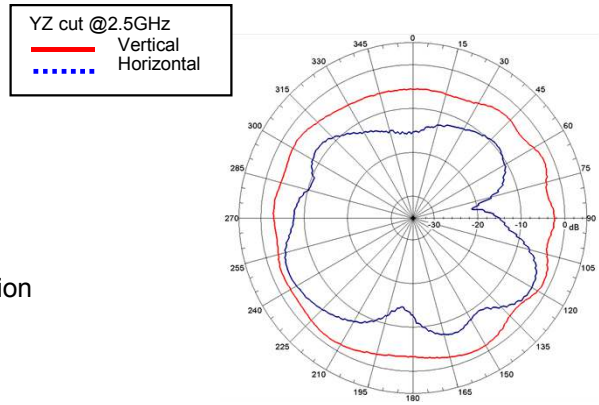












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Detail Specification: 10/28/2013

Part Number Explanation				
P/N Suffix	Packing Style	Bulk (loose pieces)	Suffix = S	eg.2500AT43A0100S
		T & R	Suffix = E	eg. 2500AT43A0100E
		T & R (Reverse)	Suffix = R	eg. 2500AT43A0100R (MOQ Applies)
		100% Tin	Suffix = None	eg. 2500AT43A0100(S, E, R)
	Eval Board (1-port SMA antenna test boards)	2500AT43A0100-EB1SMA (Page 2)		
	More Details	www.johansontechnology.com/ipc-pn-explained		

Storage Conditions and Shelf Life (On T&R or Bulk)			
Temperature:	+5C to +35°C	Shelf Life:	18 months max.
Relative Humidity:	45 to 75%		

Packaging information
www.johansontechnology.com/ipcpackaging.html

Soldering Information
www.johansontechnology.com/ipcsoldering-profile

Antenna layout and tuning techniques
www.johansontechnology.com/tuning

Antenna layout review, tuning, and characterization services
www.johansontechnology.com/ipcantennaservices

RoHS Compliance
www.johansontechnology.com/technical-notes/rohs-compliance.html

MSL Info
www.johansontechnology.com/technical-notes/msl-rating.html

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