

High Frequency Ceramic Solutions

2.45 GHz SMD Chip Antenna

P/N 2450AT43A100

Detail Specification: 1/11/2013

Page 1 of 6

General Specifications - Vertical Mounting

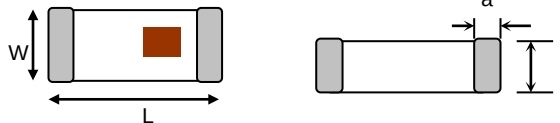
Part Number	2450AT43A100	Input Power	2W max.
Frequency Range	2400 - 2500 Mhz	Impedance	50 Ω
Peak Gain	2.0 dBi typ. (XZ-V)	Operating Temperature	-40 to +85°C
Average Gain	0.5 dBi typ. (XZ-V)	Reel Quantity	1,000
Return Loss	9.5 dB min.		

Part Number Explanation

P/N Suffix	Packing Style	Bulk	Suffix = S	eg. 2450AT43A100S
		T & R	Suffix = E	eg. 2450AT43A100E
	Termination style	100% Tin	Suffix = None	eg. 2450AT43A100 (E or S)
		Tin / Lead	Please Consult Factory	

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
T	0.047 + .004/-0.008	1.20 + 0.1/-0.2
a	0.020 $\pm$ 0.012	0.50 $\pm$ 0.30



Terminal Configuration

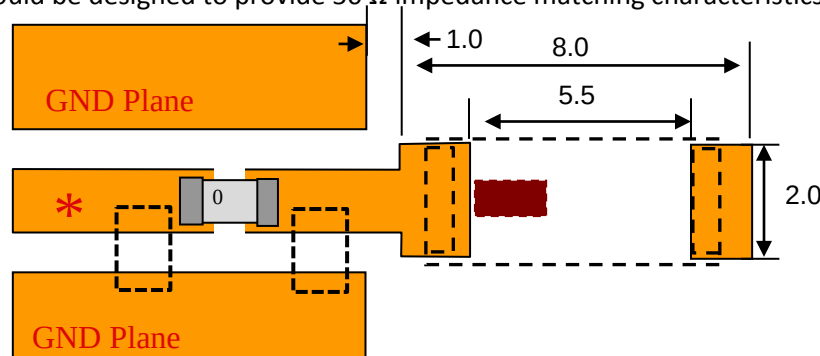
No.	Function
1	Signal Feed Terminal
2	NC (To be used as Anchoring to PCB)



Mounting Considerations - Vertical Mounting

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

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



Note: Matching components may be needed when designing into a PCB so, make sure to leave a shunt-series-shunt or "pi" network available space/footprint when laying out. More info: <http://johansontechnology.com/tuning>

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



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

Ver 1.1

2012 Johanson Technology, Inc. All Rights Reserved

www.johansontechnology.com

High Frequency Ceramic Solutions

2.45 GHz SMD Chip Antenna

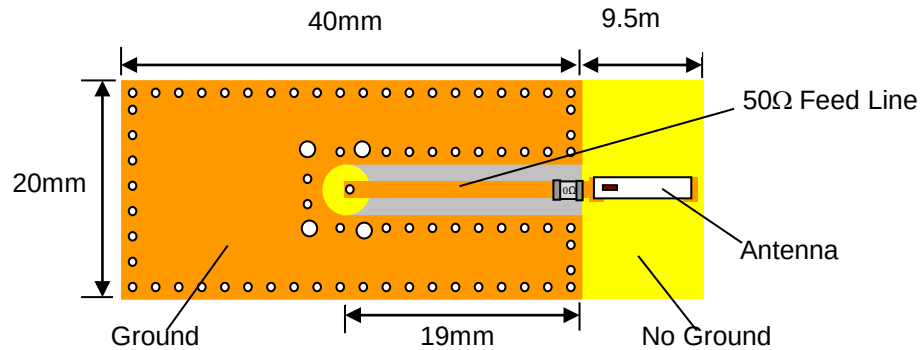
Detail Specification: 1/11/2013

P/N 2450AT43A100

Page 2 of 6

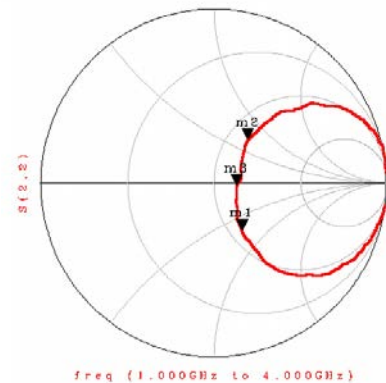
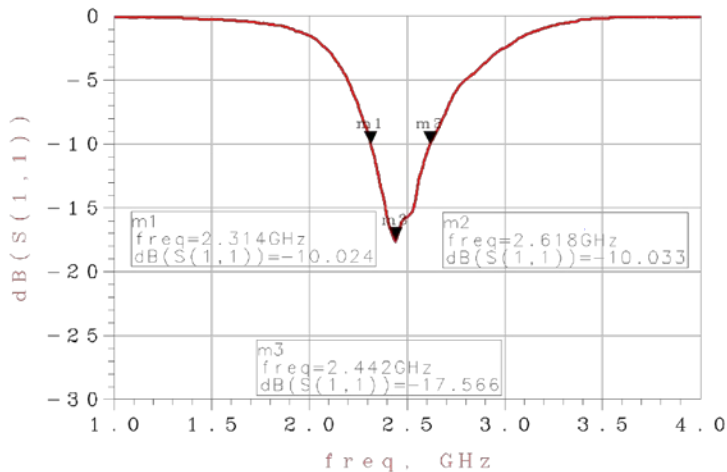
Typical Electrical Characteristics (T=25°C)

Test Board of Vertical Mounting style, p/n: 2450AT43A100-EB1SMA



* This 50ohm trace to the antenna can be shorten (considerably) to suit your PCB space constraints

Return Loss



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

2.45 GHz SMD Chip Antenna

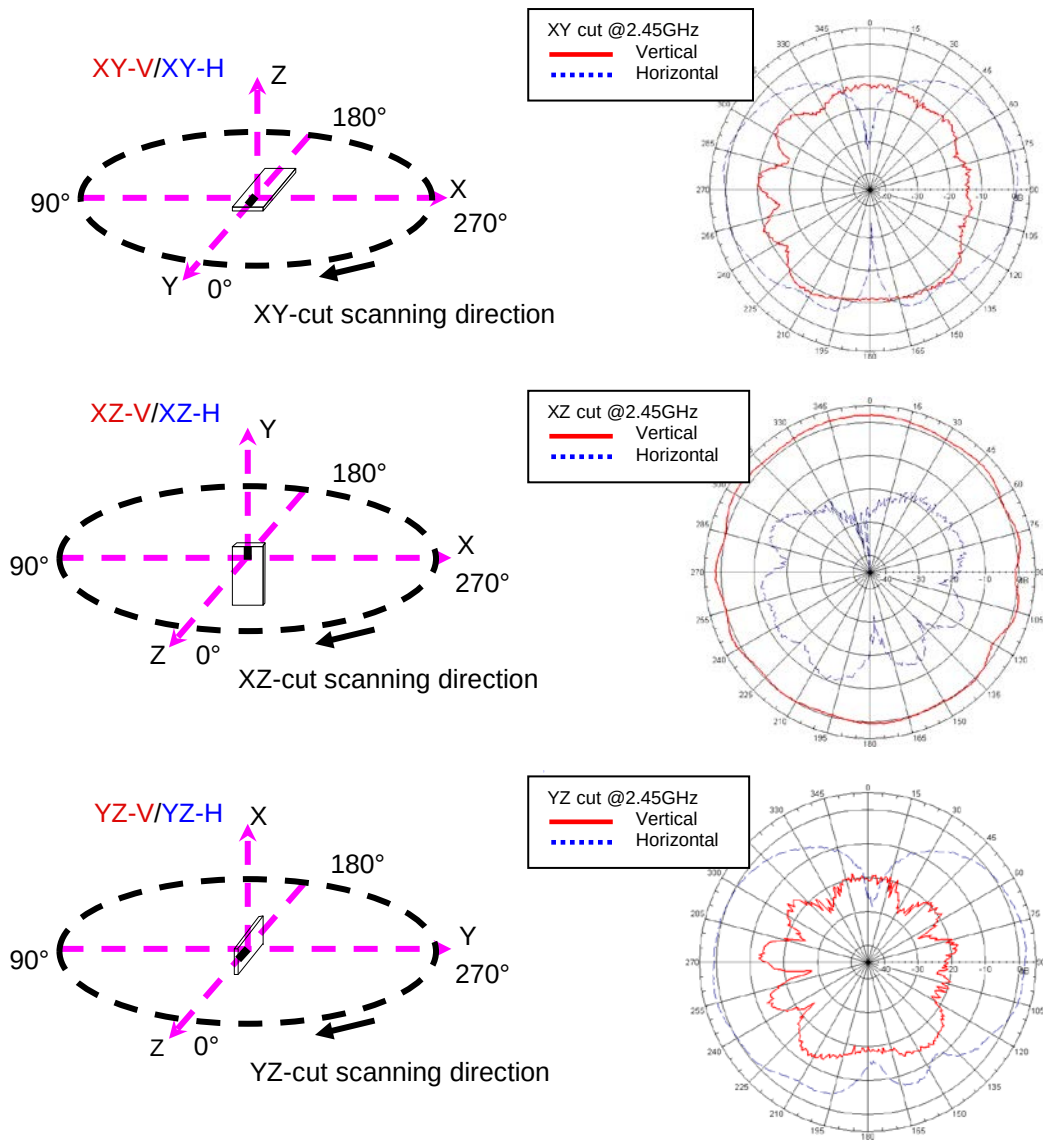
Detail Specification: 1/11/2013

P/N 2450AT43A100

Page 3 of 6

Typical Electrical Characteristics (T=25°C)

Typical Radiation Patterns on Test Board of Vertical Mounting p/n: 2450AT43A100-EB1SMA



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



Ver 1.1

www.johansontechnology.com

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

2012 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

2.45 GHz SMD Chip Antenna

P/N 2450AT43A100

Detail Specification: 1/11/2013

Page 4 of 6

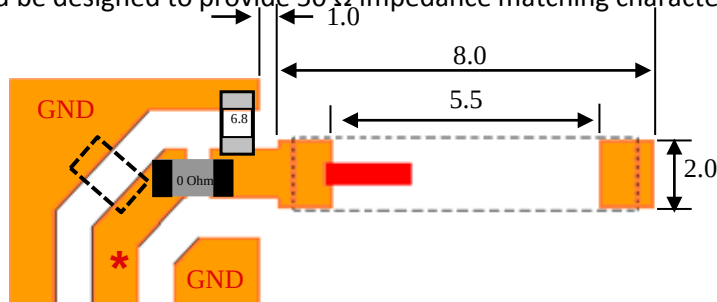
General Specifications - Horizontal Mounting

Part Number	2450AT43A100	Input Power	2W max.
Frequency Range	2400 - 2500 Mhz	Impedance	50 Ω
Peak Gain	2.0 dBi typ. (XZ-V)	Operating Temperature	-40 to +85°C
Average Gain	1.0 dBi typ. (XZ-V)	Reel Quantity	1,000
Return Loss	9.5 dB min.		

Mounting Considerations - Horizontal Mounting

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

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



Note: Matching components might be needed when design into a PCB so, make sure to leave a shunt-series-shunt or "pi" network available space/footprint when laying out. More info: <http://johansontechnology.com/tuning>



Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com

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

Ver 1.1

2012 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

2.45 GHz SMD Chip Antenna

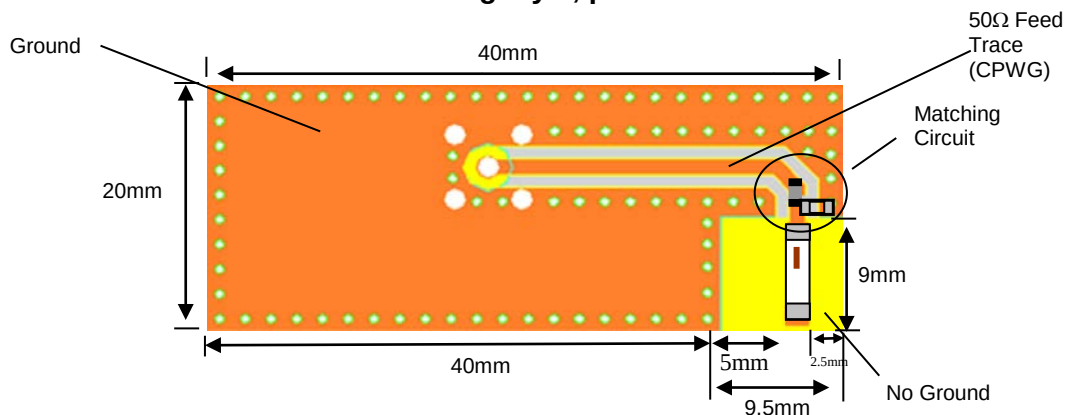
Detail Specification: 1/11/2013

P/N 2450AT43A100

Page 5 of 6

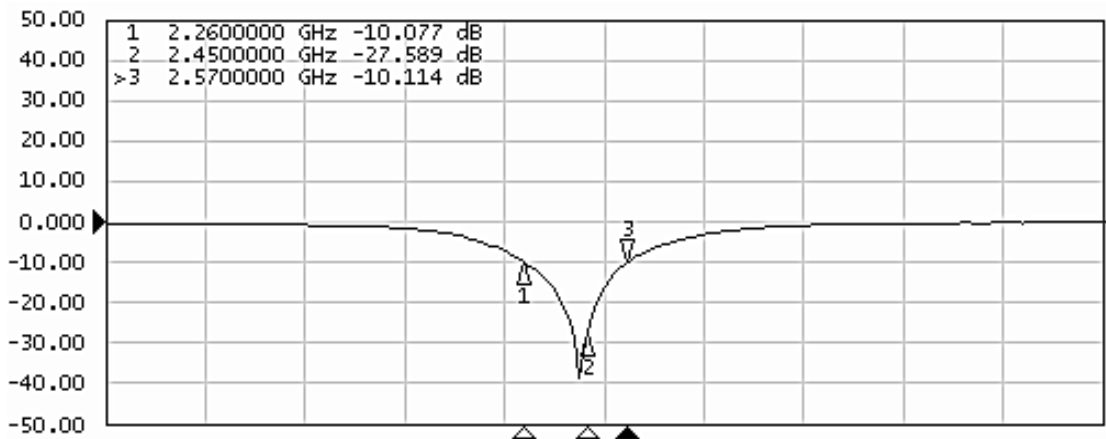
Typical Electrical Characteristics (T=25°C)

Test Board of Horizontal Mounting style, p/n: 2450AT43A100-EB2SMA



* This 50ohm trace to the antenna can be shorten (considerably) to suit your PCB space constraints

Return Loss



Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.



4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821
Ver 1.1

www.johansontechnology.com

2012 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

2.45 GHz SMD Chip Antenna

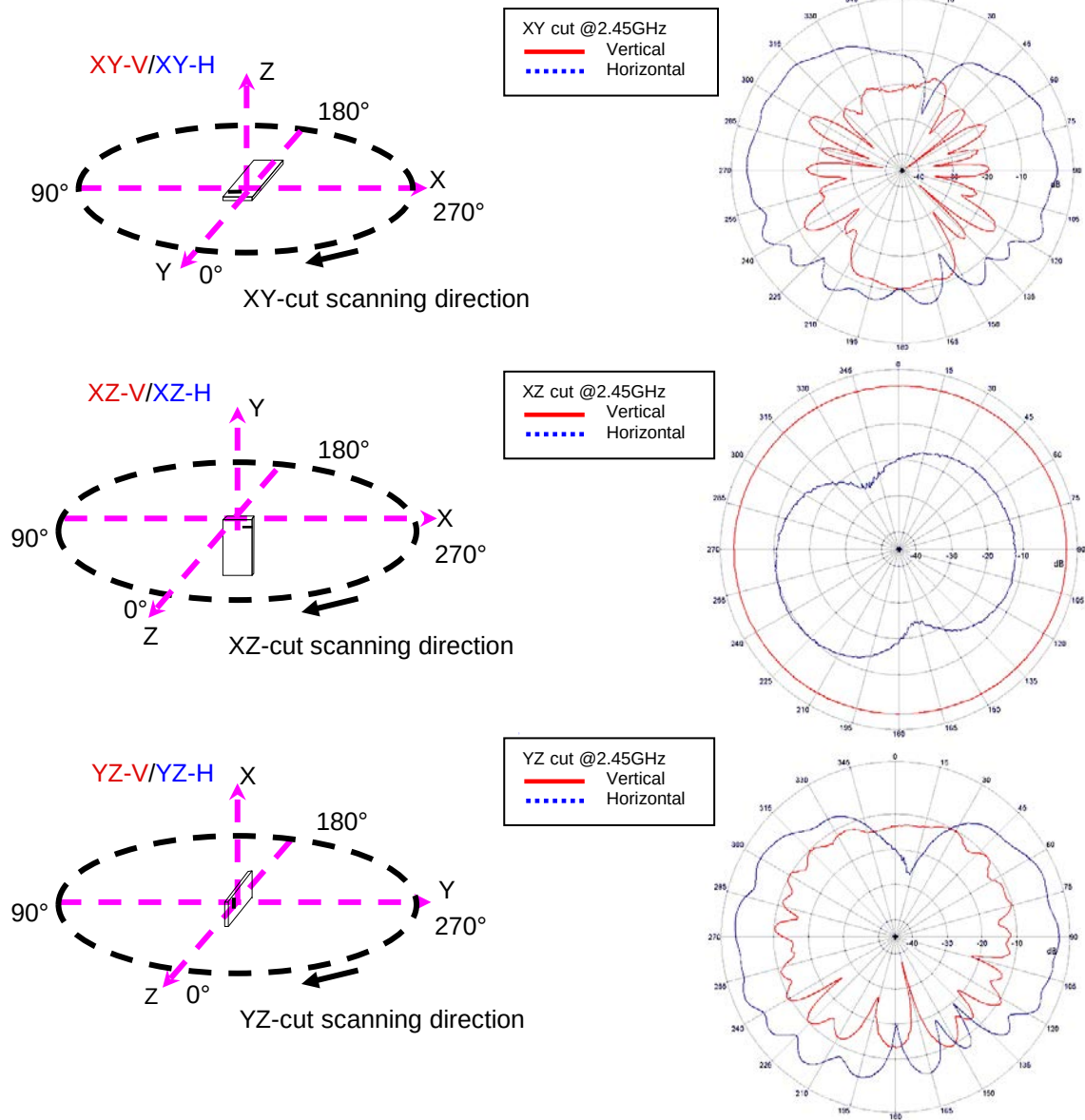
Detail Specification: 1/11/2013

P/N 2450AT43A100

Page 6 of 6

Typical Electrical Characteristics (T=25°C)

Typical Radiation Patterns on Test Board of Vertical Mounting p/n: 2450AT43A100-EB2SMA



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



Ver 1.1

www.johansontechnology.com

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

2012 Johanson Technology, Inc. All Rights Reserved

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Johanson:](#)

[2450AT43A100E](#)