

High Frequency Ceramic Solutions

2.45 GHz SMD Chip Antenna

P/N 2450AT43A100

Detail Specification: 1/11/2013

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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

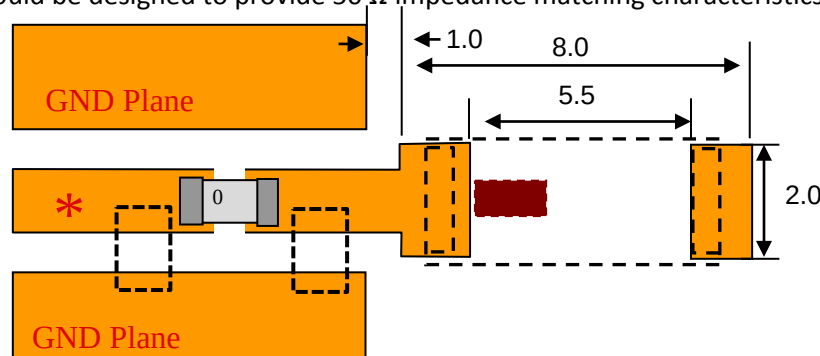
No.	Function
1	Signal Feed Terminal
2	NC (To be used as Anchoring to PCB)



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>

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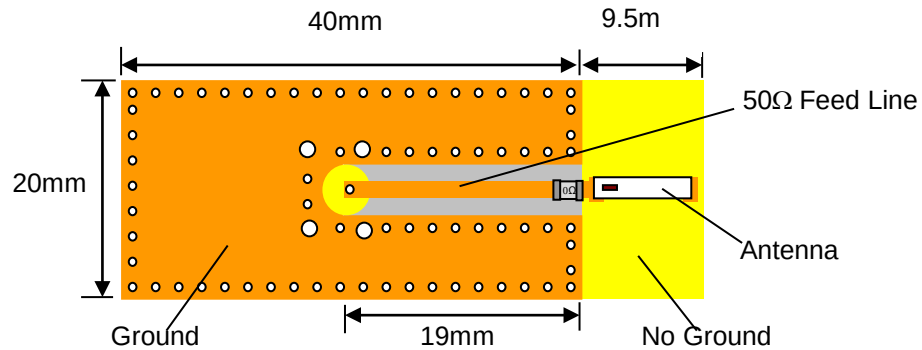
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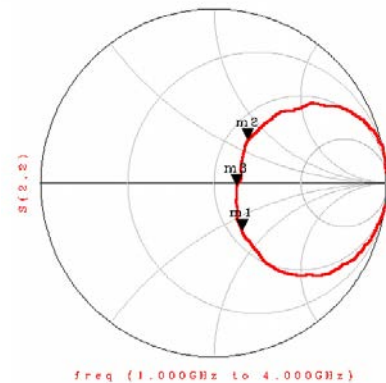
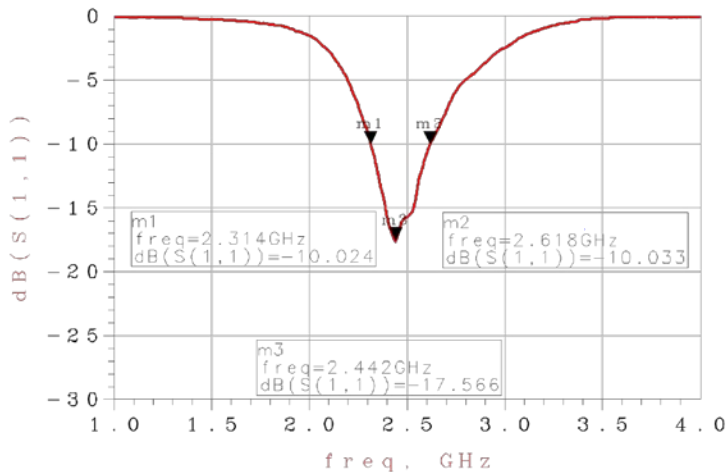
Typical Electrical Characteristics (T=25°C)

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



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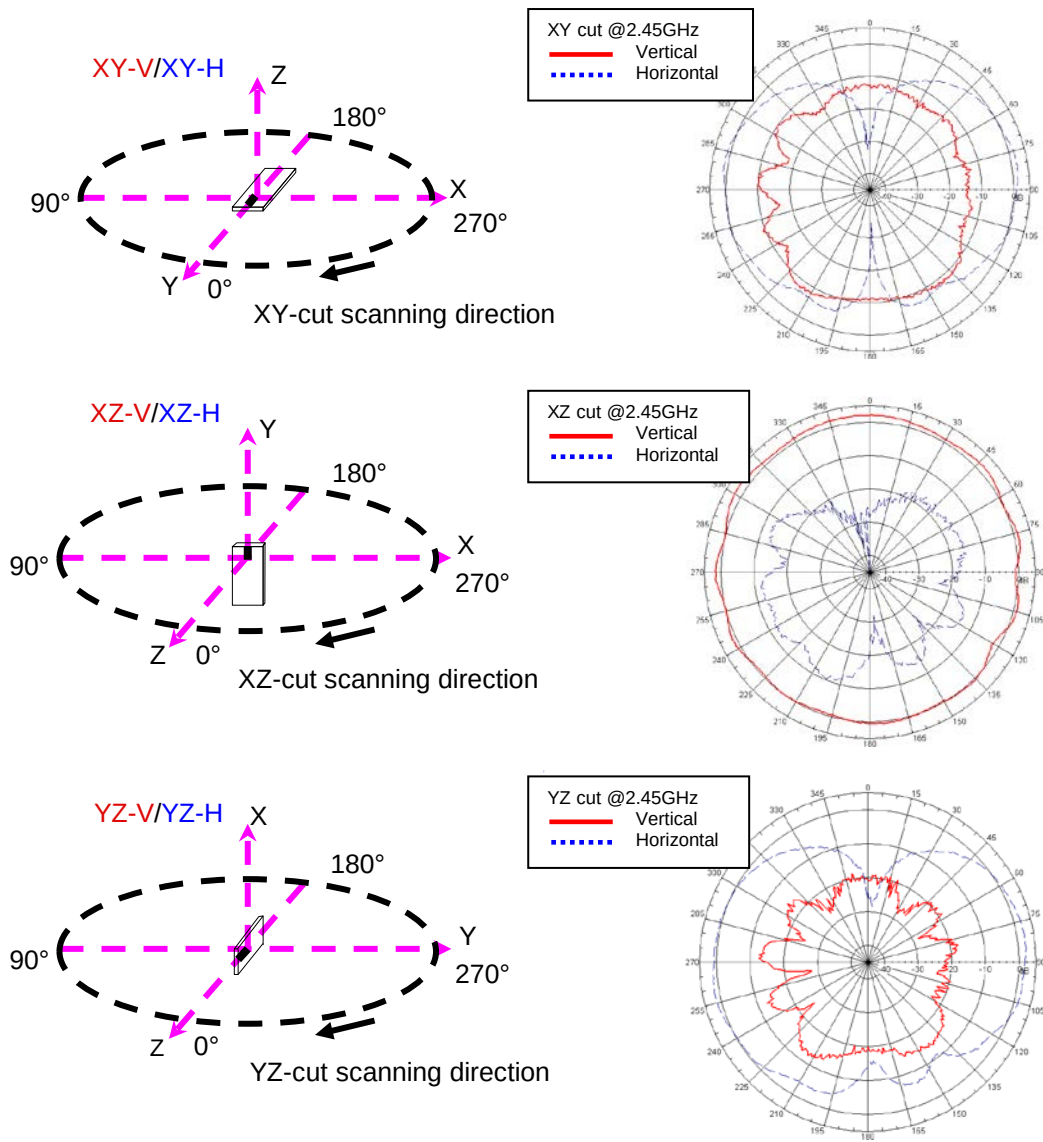
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Typical Electrical Characteristics (T=25°C)

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



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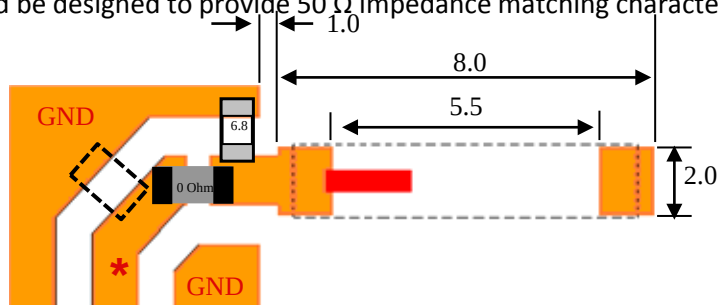
General Specifications - Horizontal Mounting

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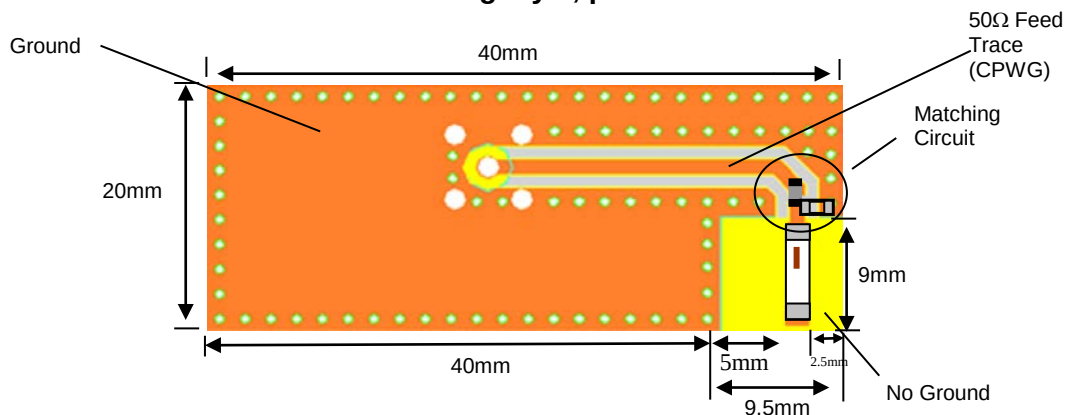
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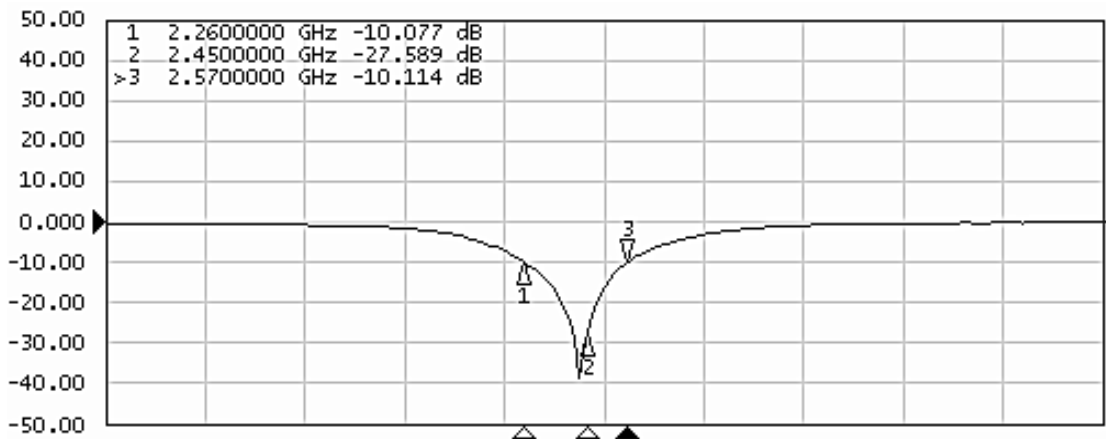
Typical Electrical Characteristics (T=25°C)

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



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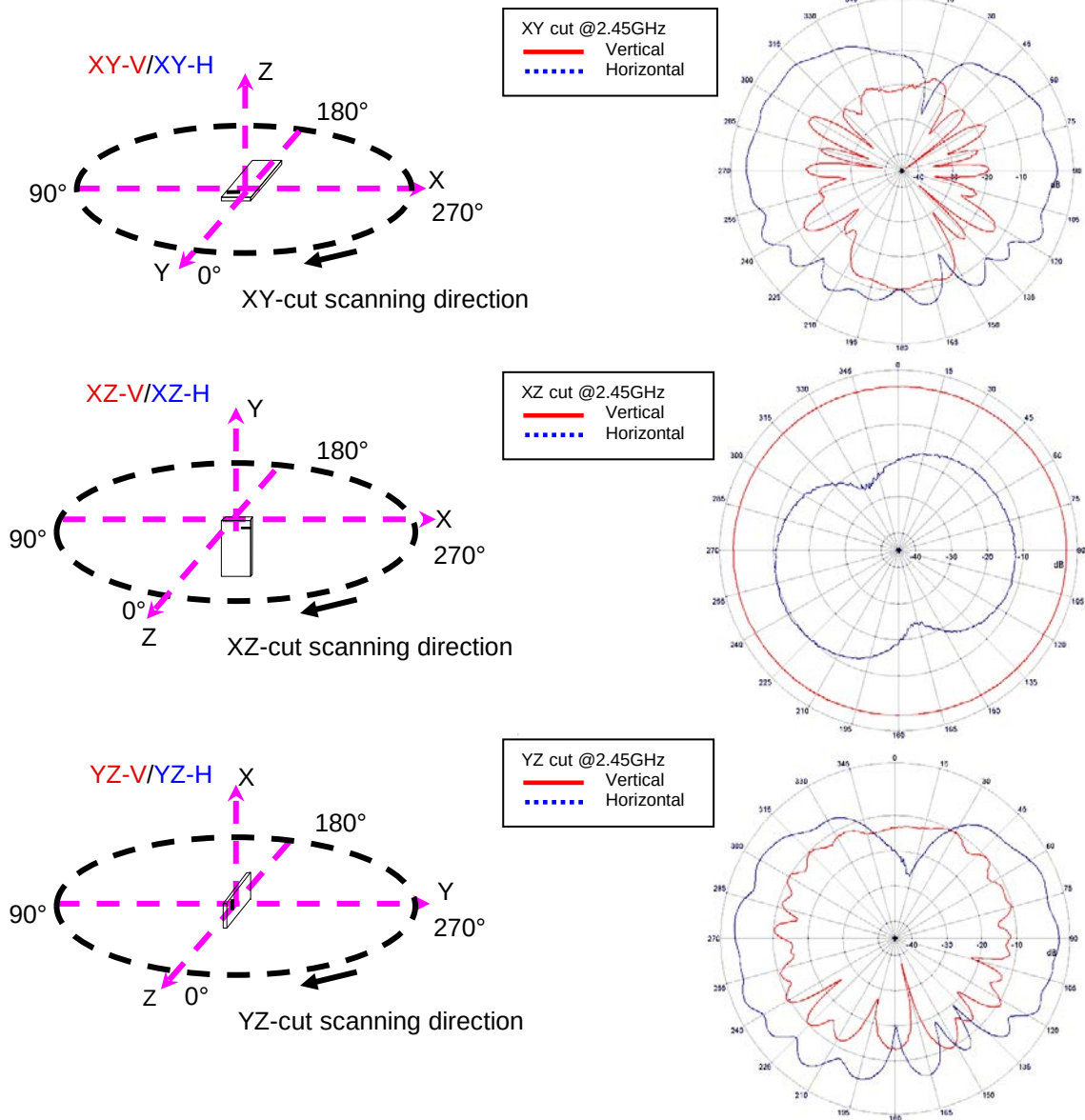
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Typical Electrical Characteristics (T=25°C)

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



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