

802.11 Dual Band 2.45/5 GHz Mini Chip Antenna. WiFi, Wireless LAN, I P/N 2450AD14A5500

Detail Specification: 7/28/2016

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General Specifications

Part Number	2450AD14A5500	
Frequency (MHz)	2400 - 2480	5150 - 5850
Ave. Rad Efficiency	60%	80%
Peak Gain (dBi typ.)	1.0 dBi typ. (XZ-Total)	4.0 dBi typ. (XZ-Total)
Average Gain (dBi typ.)	-3.5 dBi typ. (XZ-Total)	-2.5 dBi typ. (XZ-Total)
Return Loss (dB)	6 min.	6 min.
Impedance	50 Ω	
Input Power	2 Watts max. (CW)	

Let us help you with the antenna design, optimization, and tuning!

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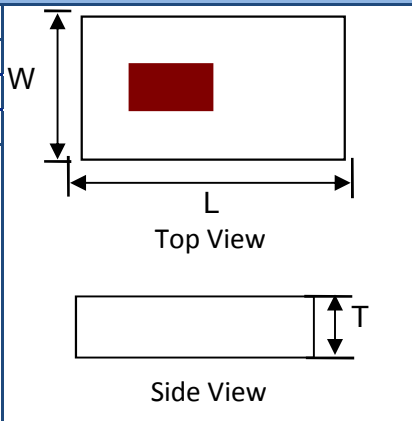
Storage Period	18 months max.
Storage Temperature	-40 to +85°C
Operating Temperature	-40 to +85°C
Reel Quantity	4000

Part Number Explanation

P/N Suffix	Packing Style	Bulk (loose)	Suffix = S	e.g. 2450AD14A5500S
		T & R	Suffix = T	e.g. 2450AD14A5500T
		100% Tin	Suffix = T or S	e.g. 2450AD14A5500(T or S)
Evaluation Board		2450AD14A5500-EB1SMA & 2450AD14A5500-EB2SMA		

Mechanical Dimensions

	In	mm
L	0.063 ± 0.004	1.60 ± 0.10
W	0.031 ± 0.004	0.80 ± 0.10
T	0.016 max.	0.40 max.



Terminal Configuration

No.	Function
1	GND
2	FEED
3	NC
3	NC

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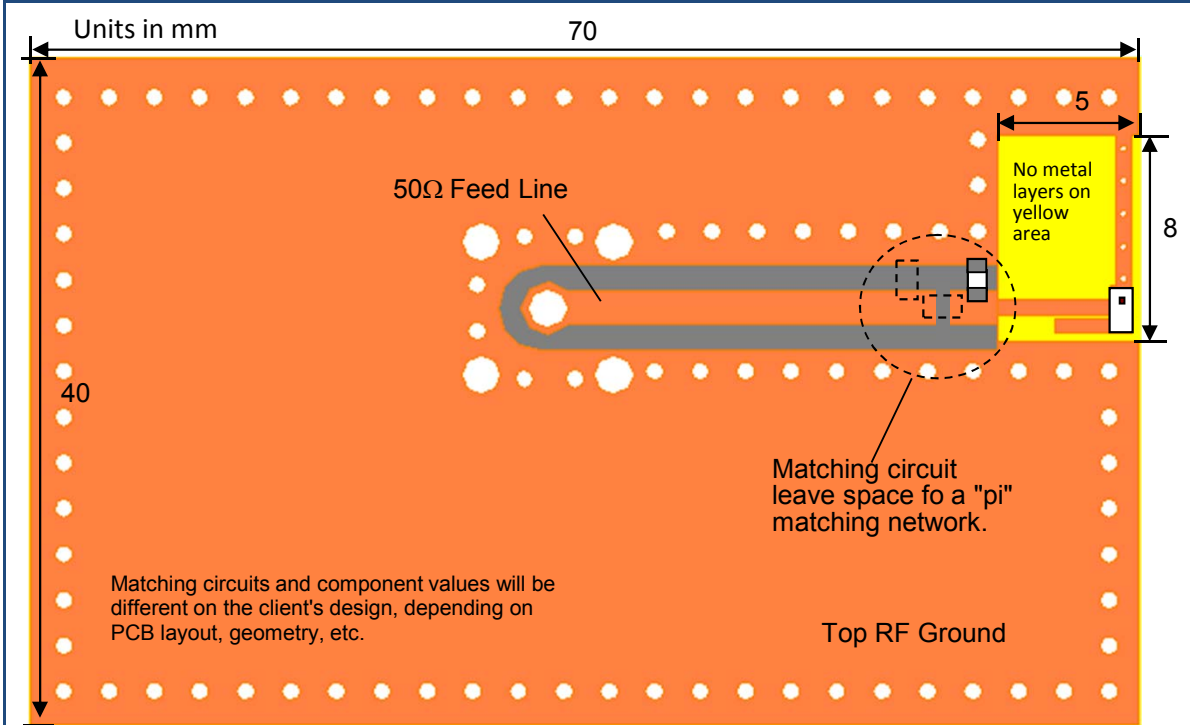
As a bonus, you'll be assigned an RF Engineer to assist you in the design for free!

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*This is the Web version of this datasheet, for the full datasheet, please contact us at: www.johansontechnology.com/ask-a-question***Mounting Considerations 1: Evaluation Board (smaller)****To order a pre-tuned 50Ω EVB with a female SMA connector click here:****www.johansontechnology.com/request-a-sample**

Would you like the layout file of the above? Have antenna tuning issues?

Please contact us if you have any questions regarding the implementation of this antenna in your PCB's layout. We'll be happy to guide you to maximize the antenna's performance.

Contact our applications engineers at:

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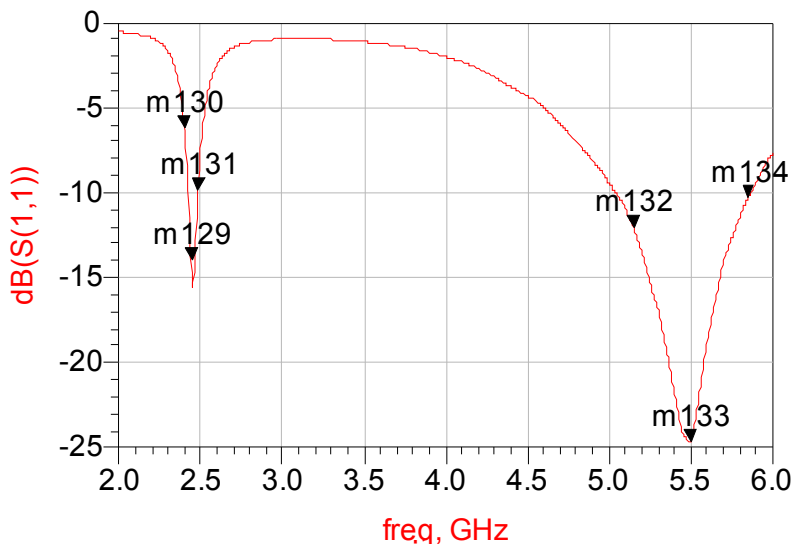
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Mounting Considerations 2: Typical Electrical Performance (T=25°C)



m 130 freq=2.400GHz dB(S(1,1))=-6.202	m 129 freq=2.442GHz dB(S(1,1))=-14.010	m 131 freq=2.484GHz dB(S(1,1))=-9.880
m 132 freq=5.150GHz dB(S(1,1))=-12.066	m 133 freq=5.500GHz dB(S(1,1))=-24.657	m 134 freq=5.850GHz dB(S(1,1))=-10.323

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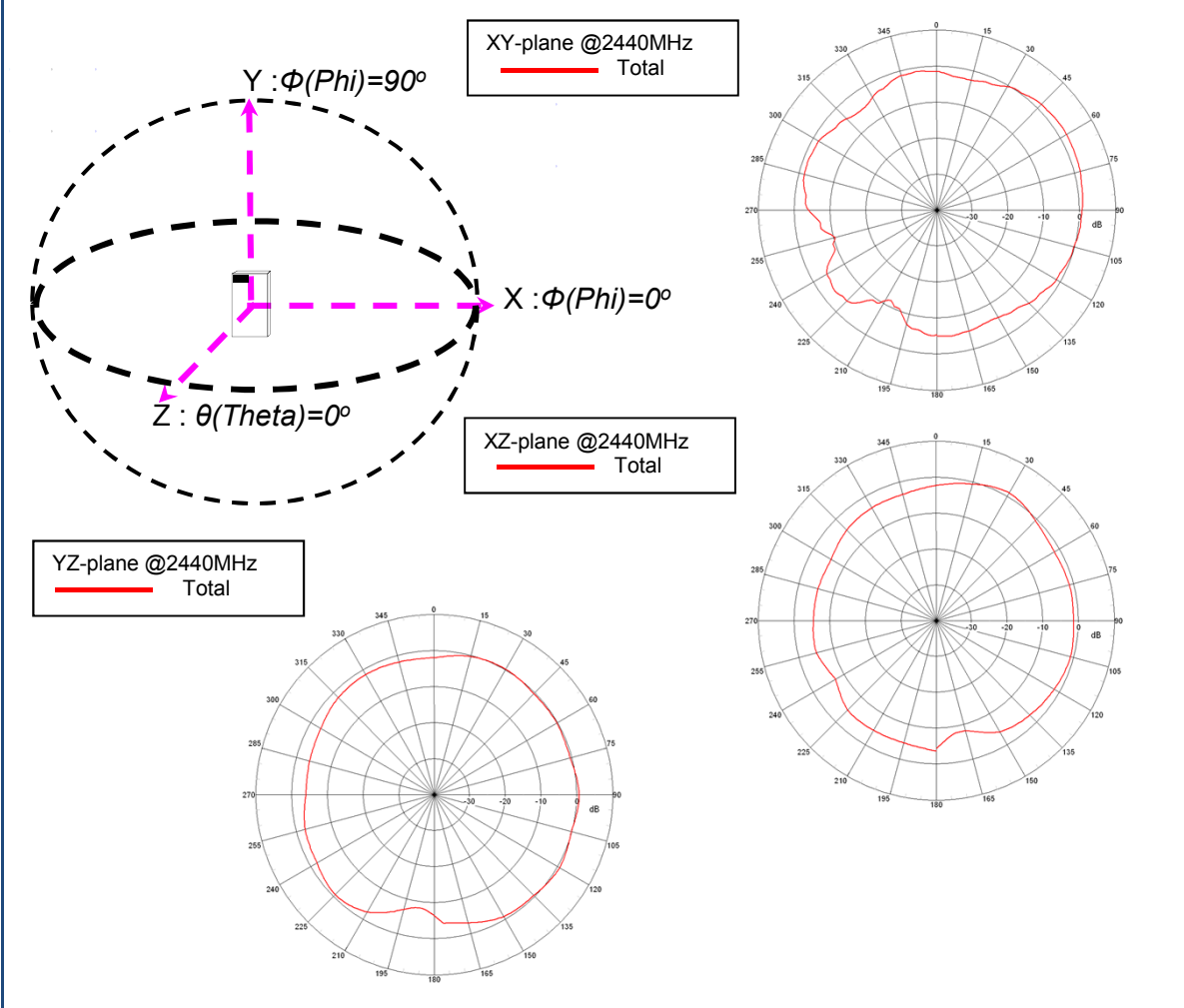
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Typical EM Radiation Performance @ 2.44GHz (T=25°C)



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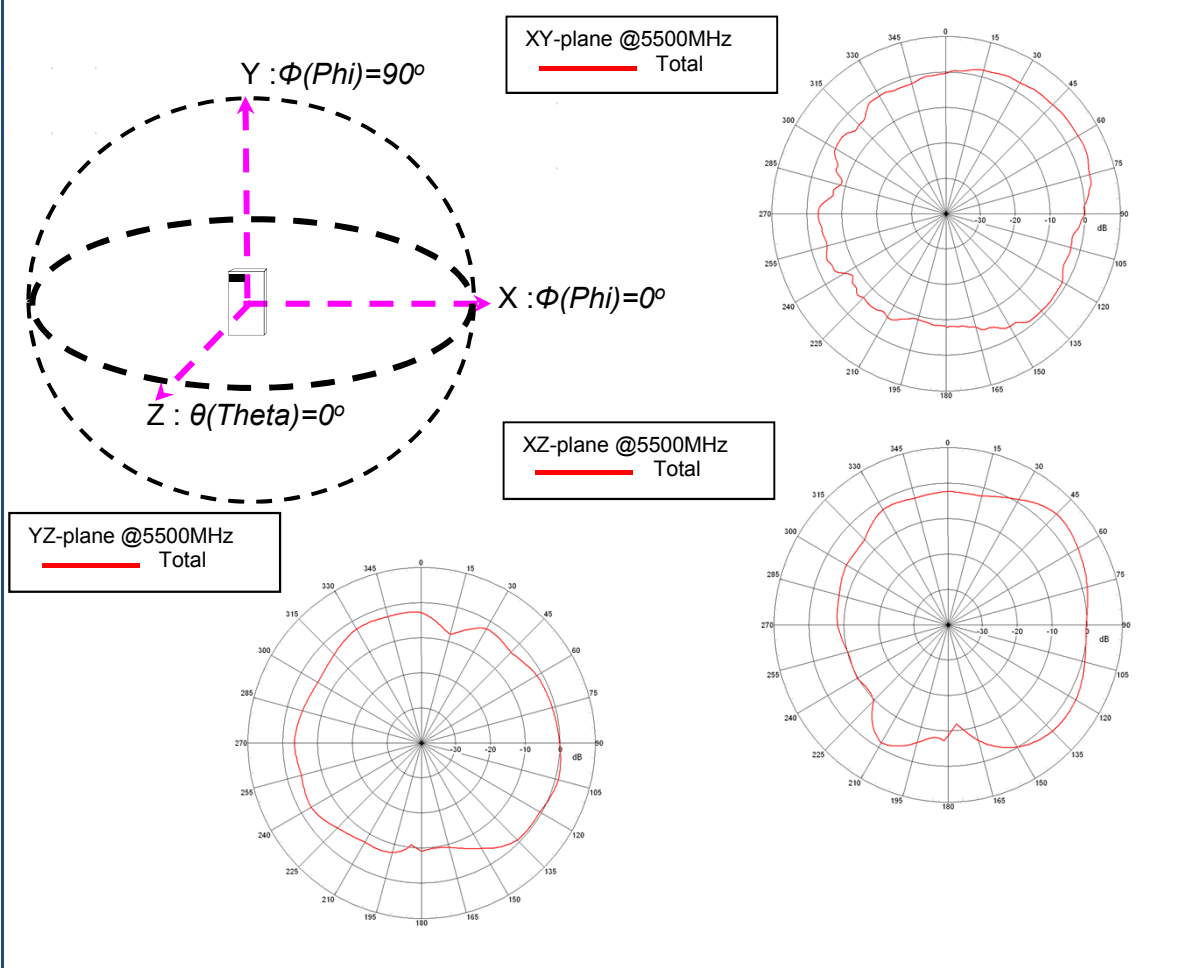
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Typical EM Radiation Performance @ 5.50 GHz (T=25°C)



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Web
Version

"High Frequency Ceramic Solutions"

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2 Free layout reviews and if you need us to tune and characterize the antenna on your product (inside anechoic chamber) we can do that too. Small lab fee may apply for the latter.

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