

# "High Frequency Ceramic Solutions"

## 2.4GHz Mini Patch Antenna, Circular Polarization, SMD

P/N 2440AT62A0085

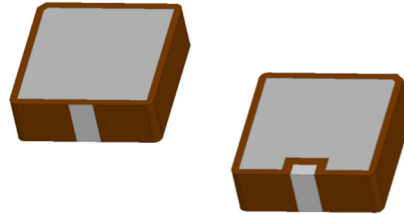
Detail Specification: 6/27/2018

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

### General Specifications

Part Number	2440AT62A0085		
Frequency (GHz)	2.4 - 2.485		
Min. Radiated Efficiency	70%		
Peak Gain (dBi)	3.5 typ.		
Average Gain (dBi)	1.3 typ.		
Return Loss (dB)	6 min.		
Polarization	RHCP		Recommended Storage Conditions and Period for unused T&R Product
Impedance ( $\Omega$ )	50		
Input Power (W)	2 max. (CW)		+5 to +35°C Humidity 45 - 75% RH 18 months max.
Operating Temperature	-40 to +85°C		Reel Quantity (pcs/reel) 600

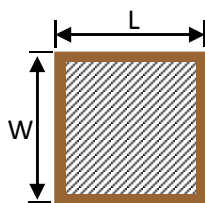


### Part Number Explanation

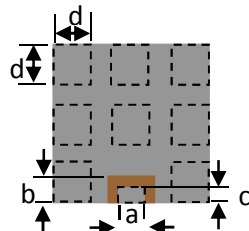
P/N Suffix	Packing Style	Bulk (loose)	Suffix = S	e.g. 2440AT62A0085S
		Tray	Suffix = E	e.g. 2440AT62A0085E
		100% Tin	Suffix = E or S	e.g. 2440AT62A0085(E or S)
	Evaluation Board	2440AT62A0085-EB1SMA		

### Mechanical Dimensions

	In	mm
L	0.472 ± 0.008	12.00 ± 0.2
W	0.472 ± 0.008	12.00 ± 0.2
T	0.157 ± 0.004	4.00 ± 0.1
a	0.079 ± 0.008	2.00 ± 0.2
b	0.079 ± 0.008	2.00 ± 0.2
c	0.047 ± 0.008	1.20 ± 0.2
d	0.118 ± 0.008	3.00 ± 0.2



Top View



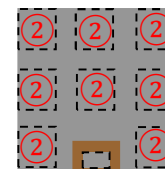
Bottom View



Side view

### Terminal Configuration

No.	Function
1	FEED
2	GND



Bottom View

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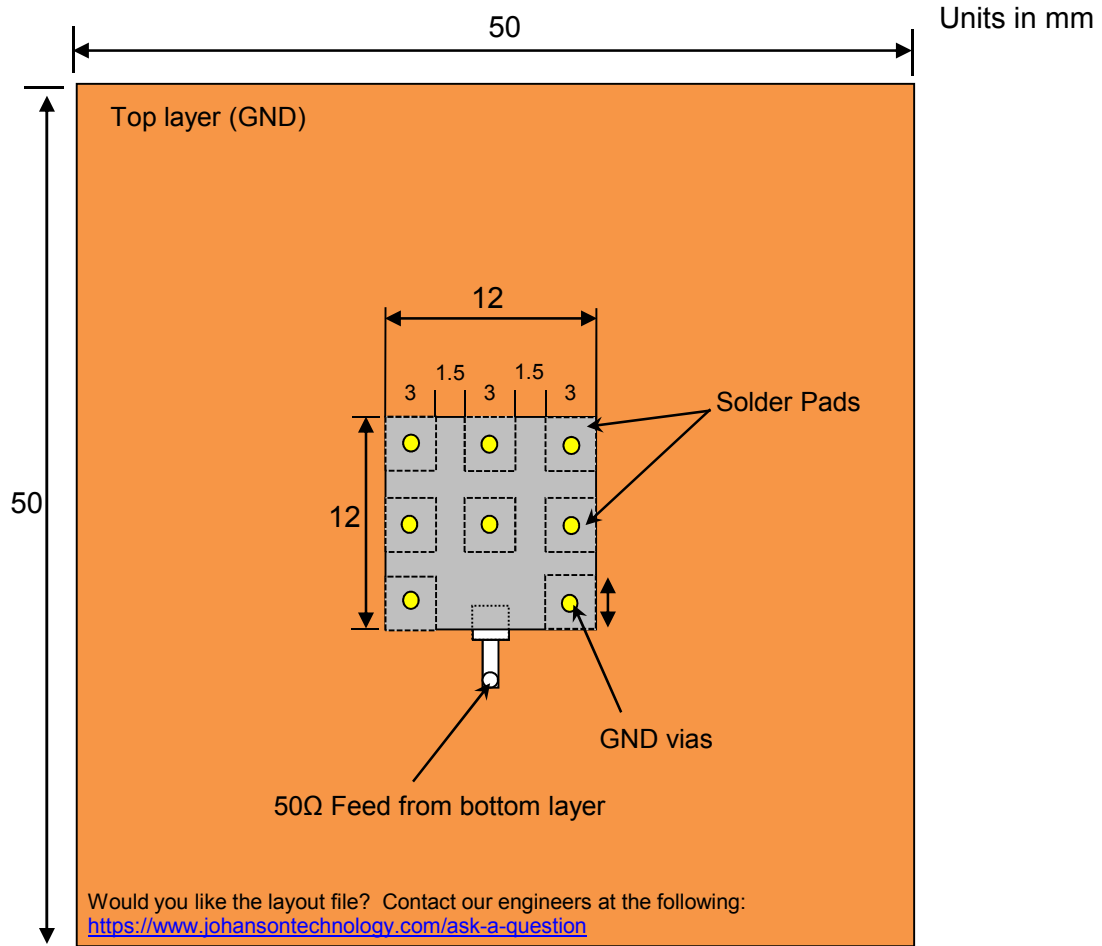
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## Mounting Considerations 1: Evaluation Board



To order a pre-tuned 50Ω EVB with a female SMA connector click here: <https://www.johansontechnology.com/request-a-sample>  
Reference p/n: 2440AT62A0085-EB1SMA

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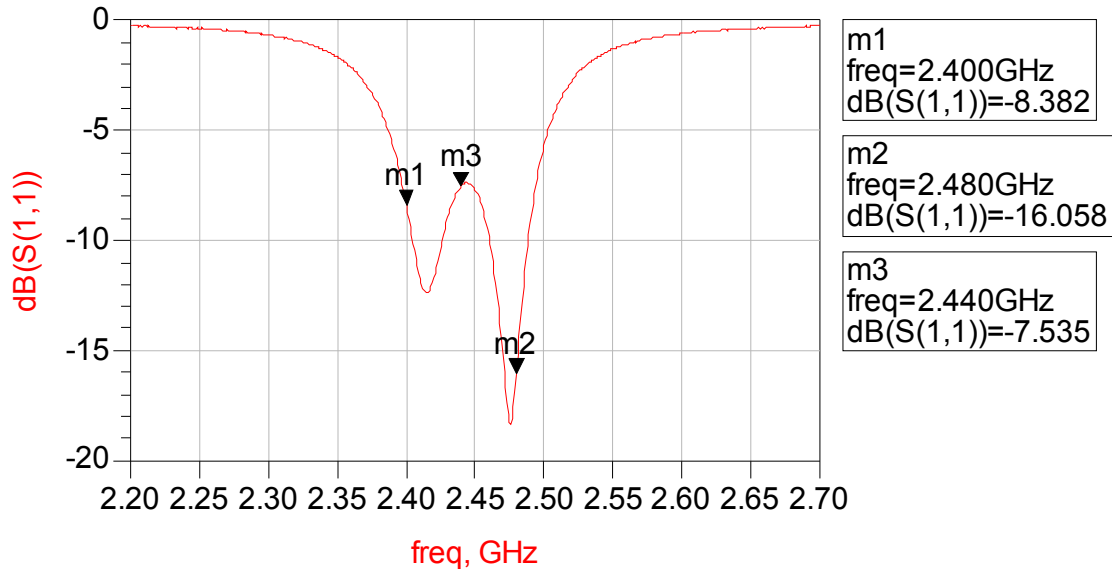
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## Mounting Considerations 1: Electrical Performance @25°C

Measured Return Loss



Would you like the antenna layout? 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:

<https://www.johansontechnology.com/ask-a-question>

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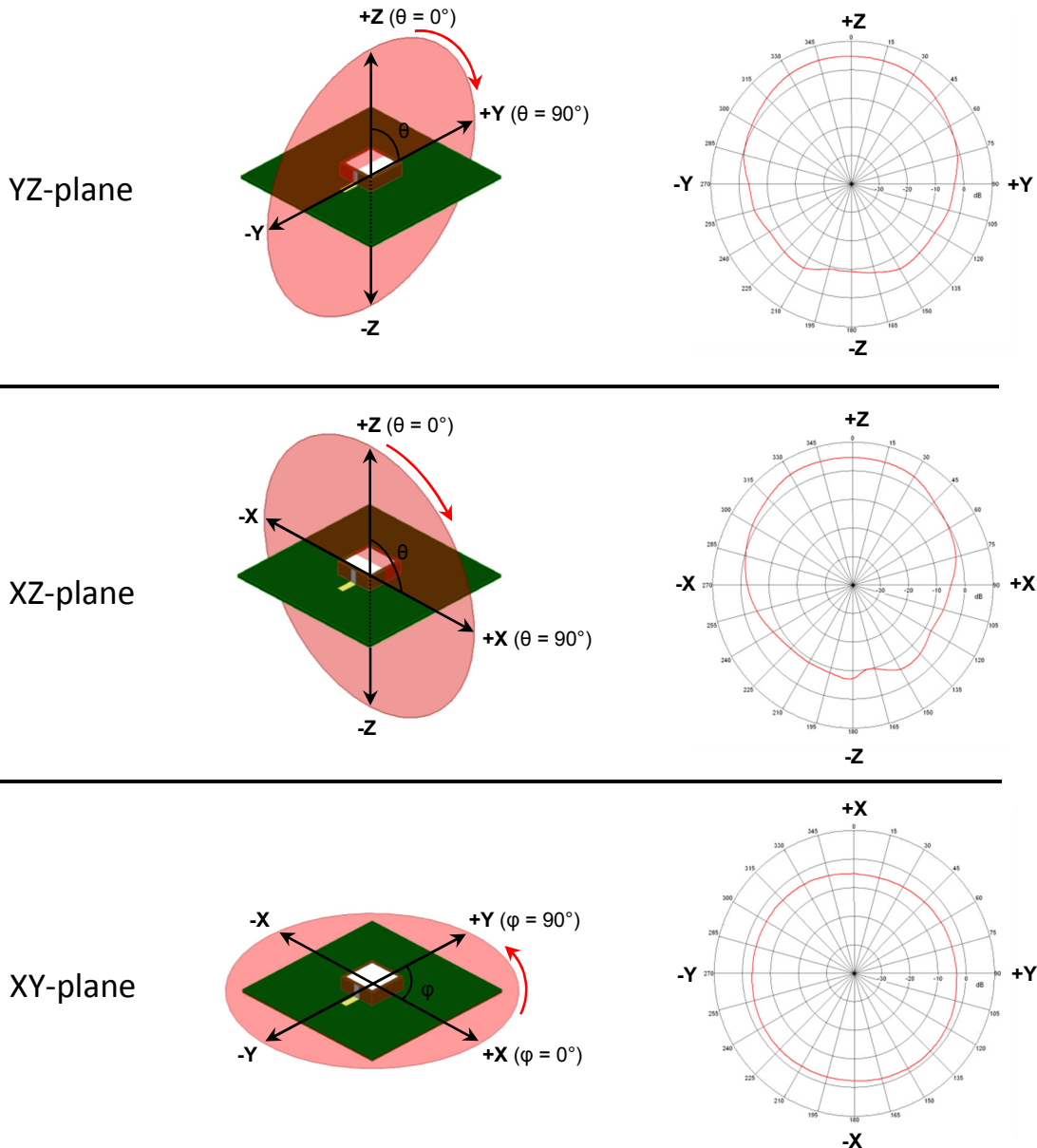
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## Mounting Considerations 1: Antenna Performance

Typical 2D radiation patterns @ 2.44GHz



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## Antenna tuning, optimization, and validation services:

<https://www.johansontechnology.com/ipc-antenna-services>

## For more antennas and to download measured S-parameters, go to:

<https://www.johansontechnology.com/antennas>

## Soldering Information

<https://www.johansontechnology.com/ipcsoldering-profile>

## MSL Info

<https://www.johansontechnology.com/msl-rating>

## Packaging Information

<https://www.johansontechnology.com/tape-reel-packaging>

## For layout review contact our applications team at:

<https://www.johansontechnology.com/ask-a-question>

## RoHS Compliance

<https://www.johansontechnology.com/rohs-compliance>

Need help designing the antenna in? Use our antenna design services!

<https://www.johansontechnology.com/ipc-antenna-services>

We provide 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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