High Frequency Ceramic Solutions

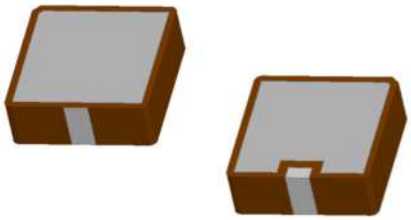
2.4GHz Mini Patch Antenna, SMD **P/N 2440AT62A0085**

Detail Specification: 5/7/2019

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	Broadly Linear
Impedance (Ω)	50
Input Power (W)	2 max. (CW)
Operating Temperature	-40 to +85°C



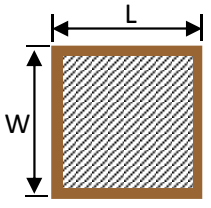
Recommended Storage Conditions and Period for unused T&R Product	+5 to +35°C Humidity 45 - 75% RH 18 months max.
Reel Quantity (pcs/reel)	600

Part Number Explanation

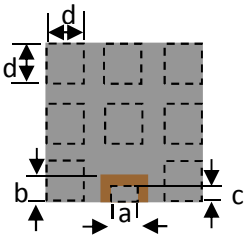
P/N Suffix	**Packing Style**	Bulk (loose)	Suffix = S	e.g. 2440AT62A0085S
		Reel	Suffix = E	e.g. 2440AT62A0085E
		100% Tin	Suffix = E or S	e.g. 2440AT62A0085(E or S)
	Evaluation Board	2440AT62A0085-EB1SMA		

Mechanical Dimensions

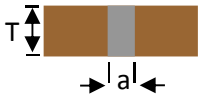
	In	mm
L	0.472 ± 0.008	12.00 ± 0.2
W	0.472 ± 0.008	12.00 ± 0.2
T	0.157 ± 0.004	4.00 ± 0.1
a	0.079 ± 0.008	2.00 ± 0.2
b	0.079 ± 0.008	2.00 ± 0.2
c	0.047 ± 0.008	1.20 ± 0.2
d	0.118 ± 0.008	3.00 ± 0.2



Top View



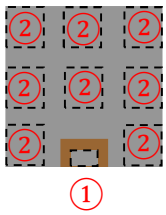
Bottom View



Side view

Terminal Configuration

No.	Function
1	FEED
2	GND



Bottom View

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

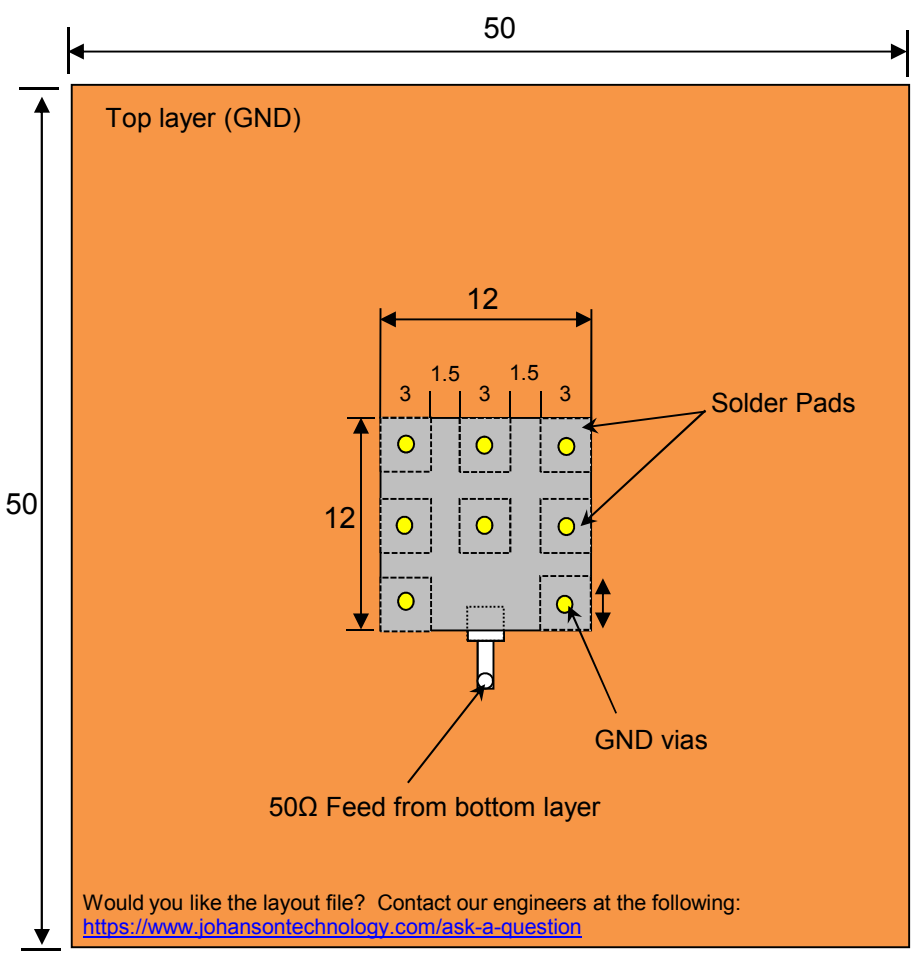
JOHANSON TECHNOLOGY

https://www.johansontechnology.com

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

2019 Johanson Technology, Inc. All Rights Reserved

Mounting Considerations 1: Evaluation Board



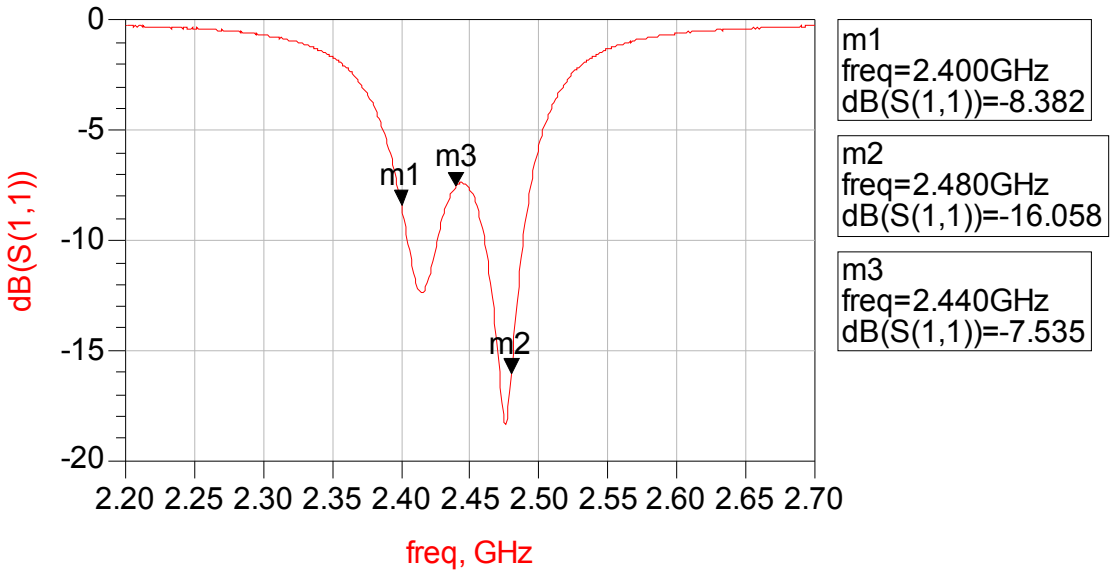
To order a pre-tuned 50Ω EVB with a female SMA connector click here: https://www.johansontechnology.com/request-a-sample
Reference p/n: 2440AT62A0085-EB1SMA

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

2019 Johanson Technology, Inc. All Rights Reserved

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

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

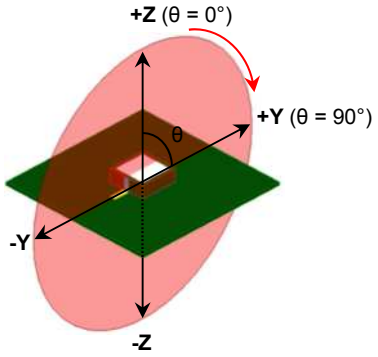
JOHANSON TECHNOLOGY
https://www.johansontechnology.com
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

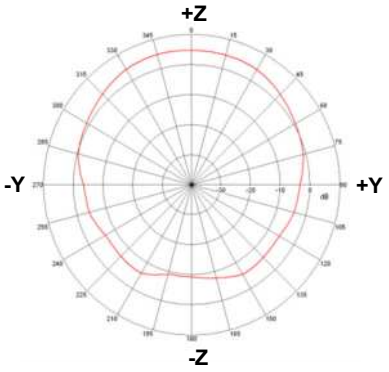
2019 Johanson Technology, Inc. All Rights Reserved

Mounting Considerations 1: Antenna Performance

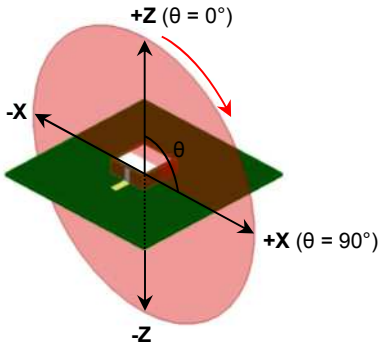
Typical 2D radiation patterns @ 2.44GHz

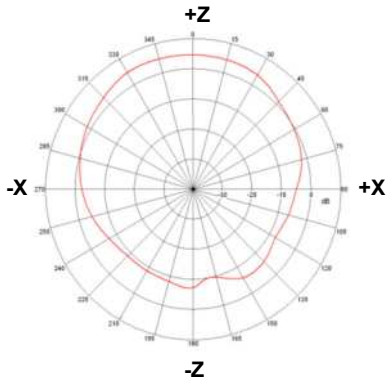
YZ-plane



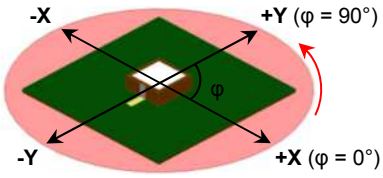


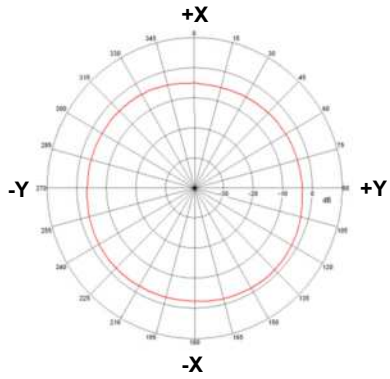
XZ-plane





XY-plane





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

2019 Johanson Technology, Inc. All Rights Reserved

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.

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

https://www.johansontechnology.com
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2019 Johanson Technology, Inc. All Rights Reserved