

"High Frequency Ceramic Solutions"

2450 MHz Small SMD Chip Antenna

P/N 2450AT42B100

Ground Clearance Requirements Minimized. This antenna was designed for corner or end-mounting

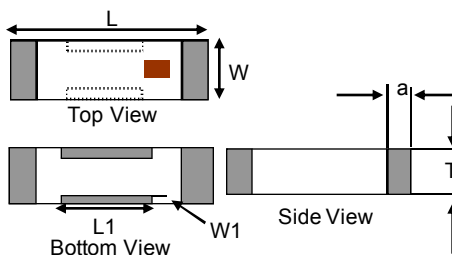
Detail Specification: 10/08/13

Page 1 of 4

General Specifications			
Part Number	2450AT42B100		
Frequency Range	2400 - 2500 Mhz		
Peak Gain	0 dBi typ. (XZ-V)		
Average Gain	-1.5 dBi typ. (XZ-V)		
Return Loss	9.5 dB min.		
Impedance	50 Ω		
Reel Quantity	2,000		
Operating Temperature	-40 to +85°C	Storage Period	-40 to +85°C
Recommended Storage Conditio	+5 ~ +35 °C, Humidity 45~75%RH	Power Capacity	2W max. (CW)



Mechanical Dimensions		
	In	mm
L	0.197 ± 0.008	5.00 ± 0.20
W	0.079 ± 0.008	2.00 ± 0.20
L1	0.102 ± 0.008	2.60 ± 0.20
W1	0.020 ± 0.008	0.50 ± 0.20
T	0.079 +.004/-0.008	2.00 +0.1/-0.2
a	0.020 ± 0.012	0.50 ± 0.30



Terminal Configuration	
No.	Function
1	Feeding Point
2	NC
3	NC
4	NC

Mounting Considerations

Line width should be designed to match 50Ω characteristic impedance (Grounded Co-Planar Waveguide), depending on PCB material and thickness. (The matching circuit and component values will be different on clients PCB layout, se notes below and go to page 2 for details).

Yellow area=Ground/Metal Clearance.

The "0.82mm" dimmension is a min. requirement, if the designer can make this larger, the better radiation and gain will occur (i.e. 2.0 or 4.0mm)

Note: It is recommended that the designer leave available slots for a "pi" (or shunt-series-shunt) network. The antenna matching network values here are used when antenna is mounted on Johanson's evaluation board. The matching values on clinet's PCB will be different, go to: johansontechnology.com/tuning and see how to obtain the new values. If you need further help, contact our RF Applications Eng Team at: www.johansontechnology.com/en/ask-a-technical-question.html

RF Via "stich" around antenna clearance and feed trace for best radiation

We perform layout review as well as antenna tuning and characterization services. Go to page 2 for details.

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 2.1

2013 Johanson Technology, Inc. All Rights Reserved

"High Frequency Ceramic Solutions"

2450 MHz Small SMD Chip Antenna

P/N 2450AT42B100

Detail Specification: 10/08/13

Page 2 of 4

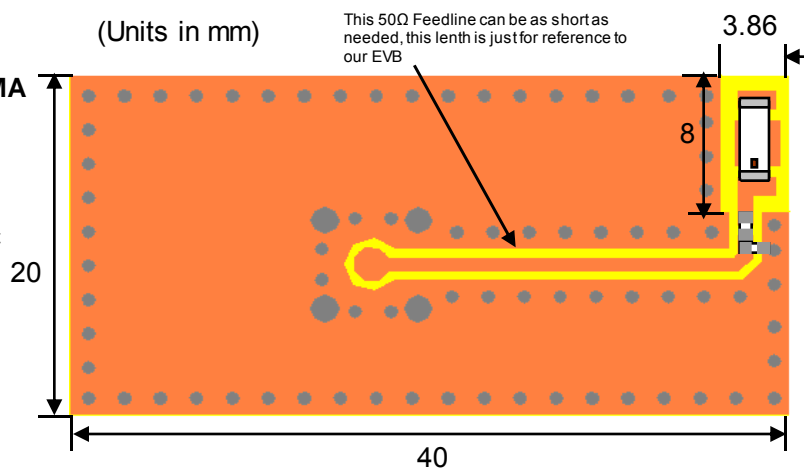
Johanson Evaluation Board (orderable item)

Test Board:

P/N: 2450AT42B100-EB1SMA
(orderable item)

To order, go to:

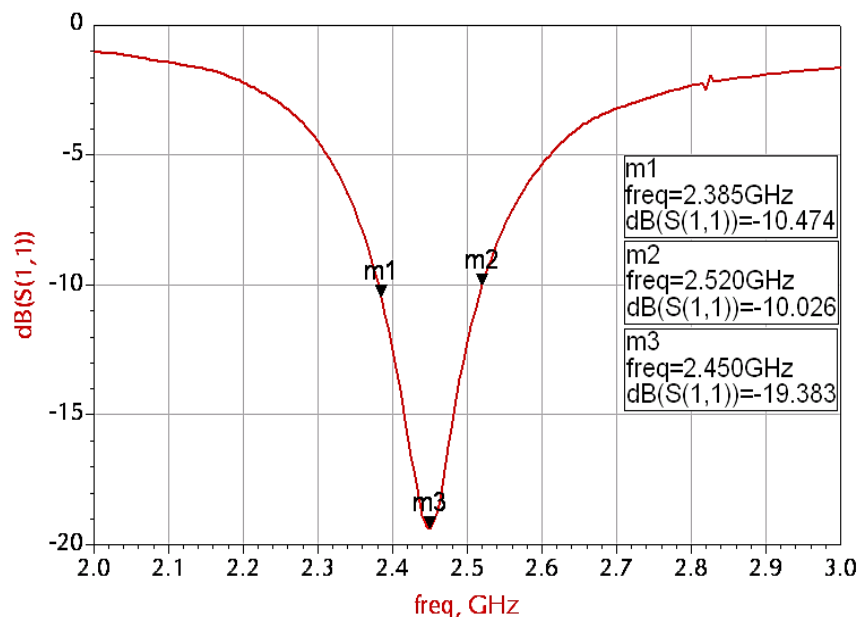
www.johansontechnology.com/samplerrequest



We offer antenna layout review, tuning, and characterization services, go to:
www.johansontechnology.com/ipcantennaservices for details and instructions

Typical Electrical Characteristics (T=25°C)

**Return Loss
(with
matching)**



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 2.1

2013 Johanson Technology, Inc. All Rights Reserved

"High Frequency Ceramic Solutions"

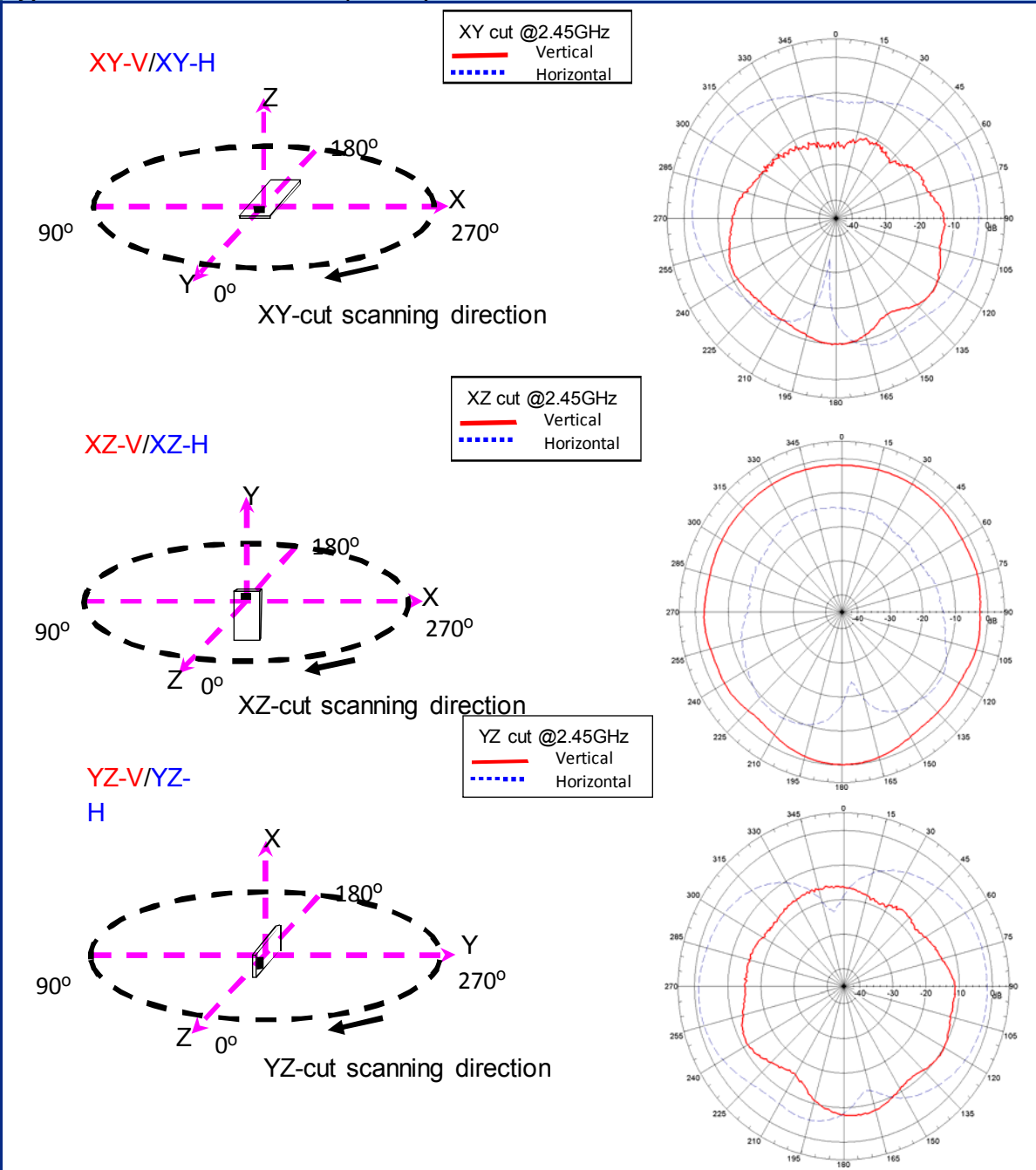
2450 MHz Small SMD Chip Antenna

P/N 2450AT42B100

Detail Specification: 10/08/13

Page 3 of 4

Typical Electrical Characteristics (T=25°C) Radiation Patterns



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 2.1

2013 Johanson Technology, Inc. All Rights Reserved

www.johansontechnology.com

"High Frequency Ceramic Solutions"

2450 MHz Small SMD Chip Antenna

P/N 2450AT42B100

Detail Specification: 10/08/13

Page 4 of 4

Part Number Explanation

P/N Suffix	Packing Style	Bulk (loose pieces)	Suffix = S	eg.2450AT42B100S
		T & R	Suffix = E	eg. 2450AT42B100E
		T & R (Reverse)	Suffix = R	eg. 2450AT42B100R (MOQ Applies)
		100% Tin	Suffix = None	eg. 2450AT42B100(S, E, R)
	Eval Board (1-port SMA antenna test boards)	2450AT42B100-EB1SMA (Page 2)		
More Details	www.johansontechnology.com/ipc-pn-explained			

Storage Conditions and Shelf Life (On T&R or Bulk)

Temperature:	+5C to +35°C	Shelf Life:	18 months max.
Relative Humidity:	45 to 75%		

Packaging information

www.johansontechnology.com/ipcpackaging.html

Soldering Information

www.johansontechnology.com/ipcsoldering-profile

Antenna layout and tuning techniques

www.johansontechnology.com/tuning

Antenna layout review, tuning, and characterization services

www.johansontechnology.com/ipcantennaservices

RoHS Compliance

www.johansontechnology.com/technical-notes/rohs-compliance.html

MSL Info

www.johansontechnology.com/technical-notes/msl-rating.html

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 2.1

2013 Johanson Technology, Inc. All Rights Reserved

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)
Email: org@lifeelectronics.ru