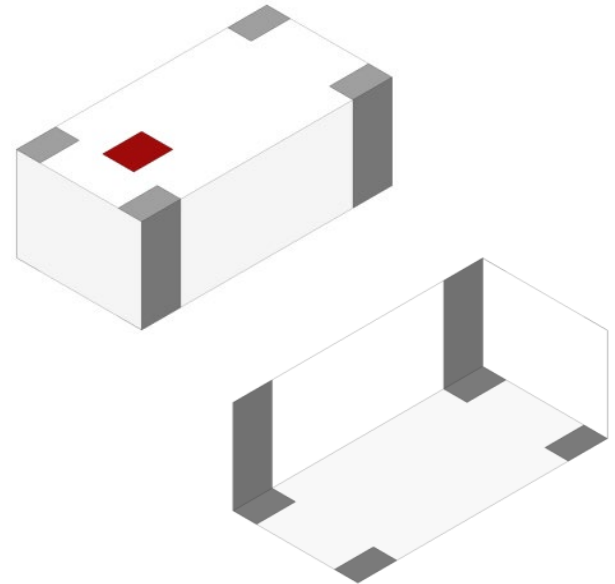
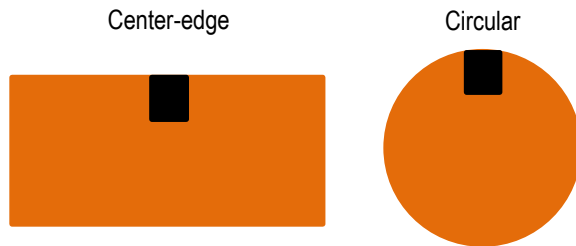


2.4GHz, EIA 1206, Bluetooth/WiFi/Zigbee

Johanson Technology, Inc. (JTI) miniature RF ceramic chip antennas are made using Low Temperature Co-fired Ceramic (LTCC) technology which has the ability to embed low and high dielectric constants inside our antenna. This enables our components to have high detuning resilience and stability over extreme temperatures (~2ppm).

Recommended mounting locations for this antenna



General Specifications¹²

Passband Frequency (MHz)	2400 - 2480
Peak Gain (dBi)	1.5
Average Gain (dBi)	-1.0
Radiated Efficiency	72%
Return Loss (dB)	10 min.
Impedance (Ω)	50

Maximum Ratings

Power Capacity (W)	2 max. (CW)
Operating Temperature	-40 to +125°C
Recommended Storage Conditions post-installation (°C)	-40 to +85
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

¹ Typical value represents average measurement at 25°C. Min./Max. values represent measurements from -40°C to +85°C

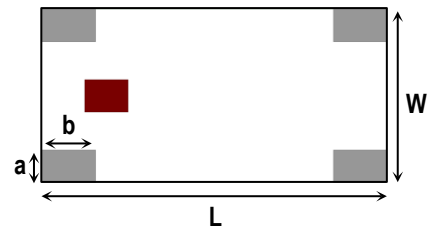
² General specifications measured on Johanson's evaluation board PN 2450AT18D0100001CE1



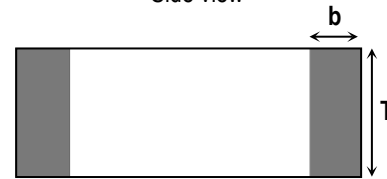
Mechanical Dimensions

	Inches			Millimeters		
L	0.126	±	0.008	3.20	±	0.2
W	0.063	±	0.008	1.60	±	0.2
T	0.047	±	0.004	1.20	±	0.1
a	0.012	+0.004 / -0.008		0.30	+0.1 / -0.2	
b	0.020	±	0.008	0.50	±	0.2

Top view



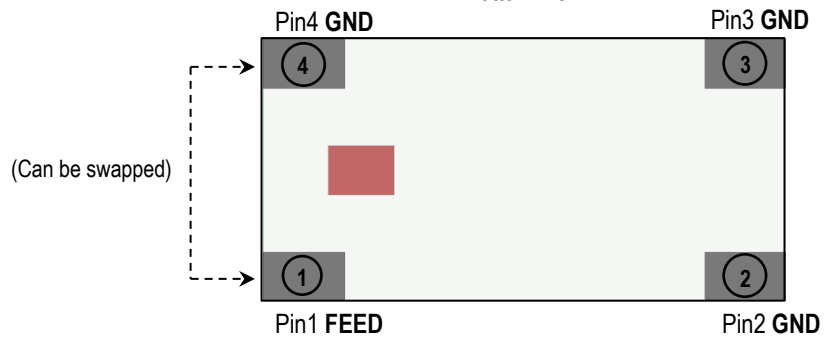
Side view



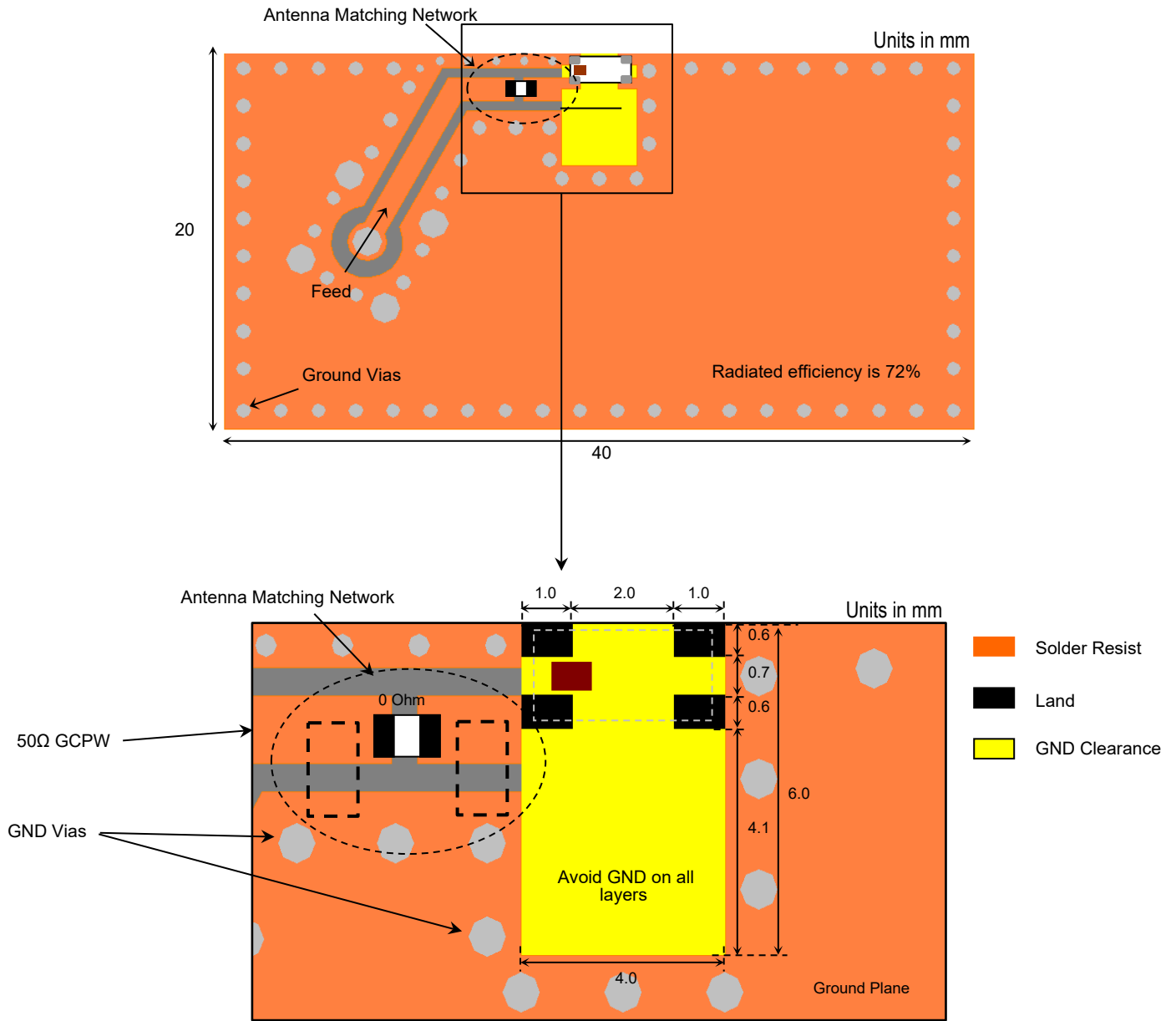
Terminal Configuration

Pin Number	Function	(Alternate)
		Function
Pin1	FEED	GND
Pin2	GND	GND
Pin3	GND	GND
Pin4	GND	FEED

Bottom view

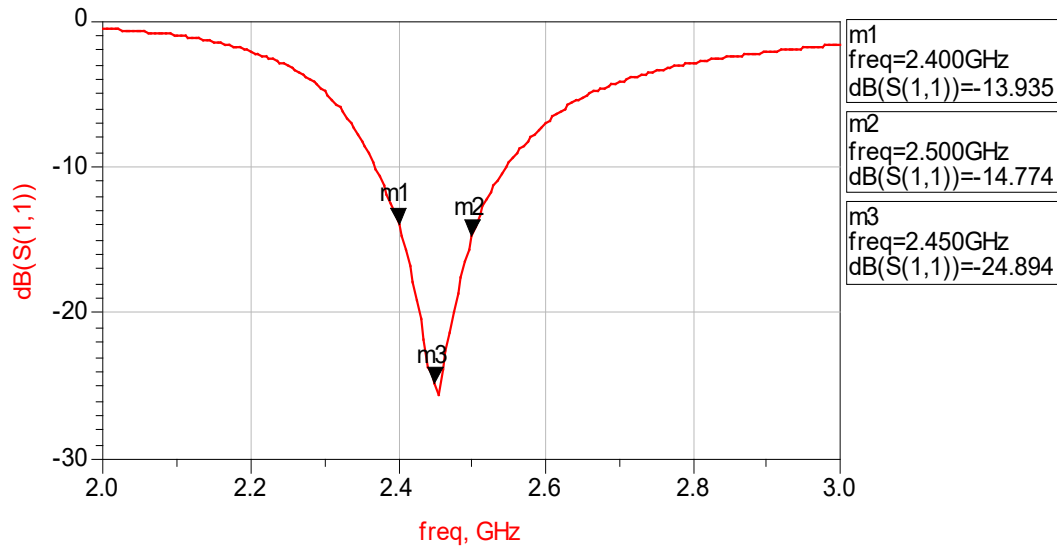


Evaluation Board and Mounting Configuration (PN 2450AT18D0100001CE1)

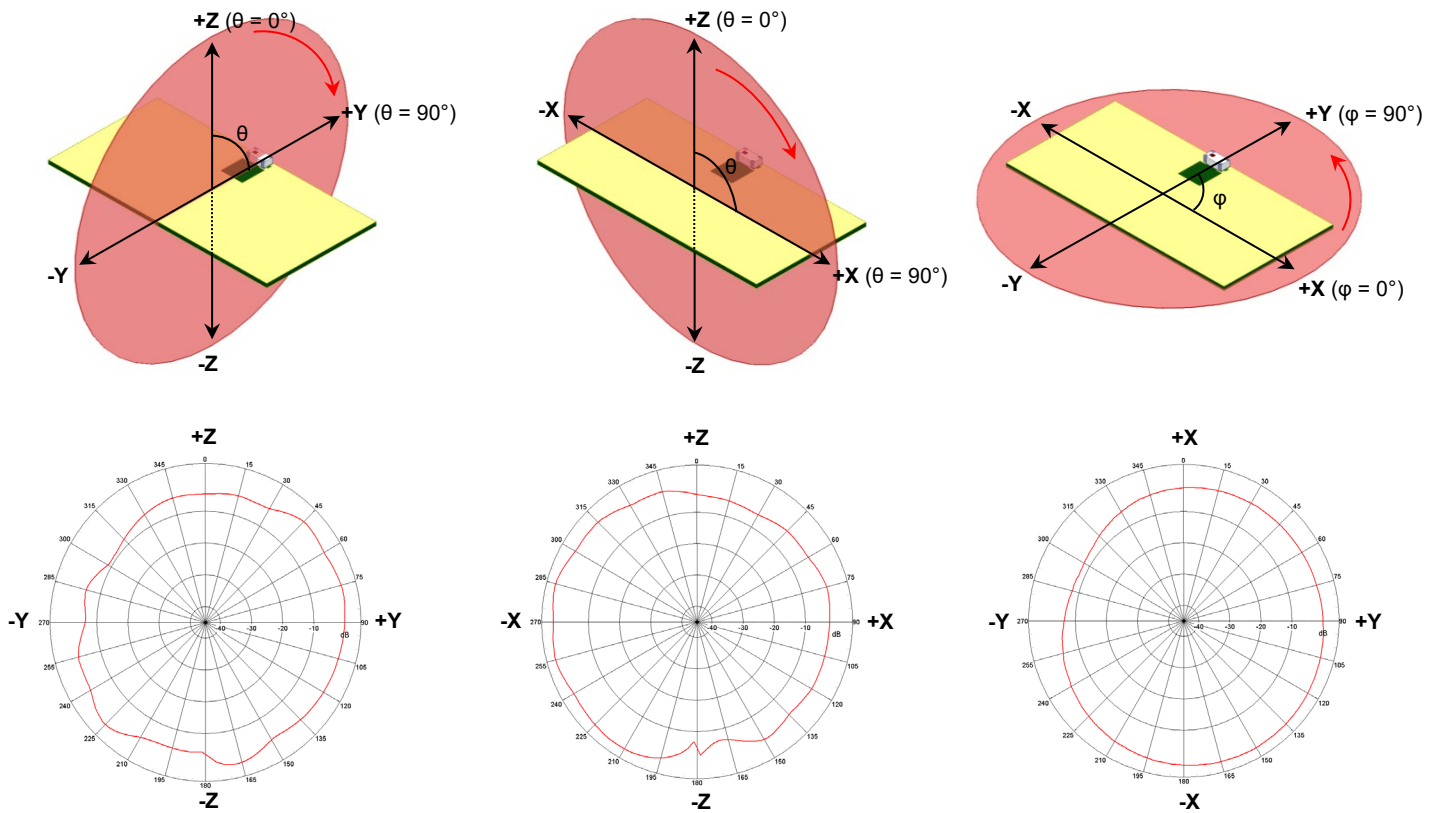


If you'd like the CAD PCB layout or have any questions,
contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

Evaluation Board Return Loss Measurement



Evaluation Board 2D Radiation Patterns



If you would like to connect with a Johanson Technology RF engineer to go over the layout or suggest an antenna to go with your design, see our [Ask-a-question page](#).

Orderable Part Number

Part Number Explanation		
Packaging Style	Bulk (loose pcs.)	P/N. 2450AT18D0100001B
	T & R (7" Reel Embossed Tape)	P/N. 2450AT18D0100001E (Qty: 1,000 pcs./reel)
Evaluation Board	Assembled PCB (50Ω SMA)	P/N. 2450AT18D0100001CE1

Important Links

[2450AT18D0100001E Downloads](#)

[More Antennas](#)

[Antenna Tuning, Optimization, and Validation Services](#)

[Soldering Information](#)

[MSL Information](#)

[Packaging Information](#)

[RoHS Compliance](#)

Contact our application engineers for a PCB layout review!