2.45 GHz wide band, small form factor SMD chip antenna

P/N 2450AT43F0100

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| General Specifications | | | | | |
|---------------------------|-----------------|-----------------------|-----------------------|--|--|
| Part Number | 2450AT43F0100 | Reel Quanity | 1,000 pcs | | |
| Operating Frequency (MHz) | 2400 - 2500 Mhz | Operating Temperature | -40 to +85°C | | |
| Peak Gain (XZ-total) | 2.1 dBi typ. | Recommended Storage | +5 ∼ +35 °C, Humidity | | |
| Average Gain (XZ-total) | 1.0 dBi typ. | Conditions | 45~75%RH 12 months | | |
| Impedance | 50 Ω | Power Capacity | 2W max. (CW) | | |

| Part Numbe | rt Number Explanation | | | | |
|-------------------|-----------------------|----------|--|----------------------------|--|
| | | Bulk | Suffix = S | eg. 2450AT43F0100S | |
| P/N Suffix | Packing Style | T&R | Suffix = E | eg. 2450AT43F0100E | |
| | | 100% Tin | Suffix = E or S | eg. 2450AT43F0100 (E or S) | |
| | Evaluation Board | Bulk | 2450AT43F0100-EB1SMA (with female SMA connector) | | |

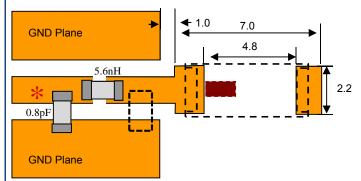
| Mechanical Dimensions | | | | |
|-----------------------|----------------------|-------------------|--|--|
| | ln | mm | | |
| L | 0.236 ± 0.008 | 6.00 ± 0.20 | | |
| W | 0.079 ± 0.008 | 2.00 ± 0.20 | | |
| T | 0.047 0.2 +.004 /008 | 1.20 + 0.1 / -0.2 | | |
| а | 0.020 ± 0.012 | 0.50 ± 0.30 | | |
| | w | → a ← T | | |

| Terminal Configuration | | | | | |
|------------------------|----|---------------|---|--|--|
| No. | | Function | | | |
| 1 | | Feeding Point | | | |
| 2 | NC | | | | |
| | 1 | | 2 | | |

Mounting Considerations

Mount these devices with brown mark facing up. Units: mm

*Line width should be designed to provide 50 Ω impedance matching characteristics.



Want the layout file of the above? Send us a message at: www.johansontechnology.com/component/techquestion

It is recommended that the designer leave available slots for a "pi" (or shunt-series-shunt) network. The antenna matching network values above are used when antenna is mounted on Johanson's evaluation board. The matching values on client's PCB will be different. Go to: http://johansontechnology.com/tuning and see how to obtain the new values.

If you need further help and would like us to do do the tuning and characterization, go to: www.johansontechnology.com/ipcantennaservices (nominal lab fee may apply)



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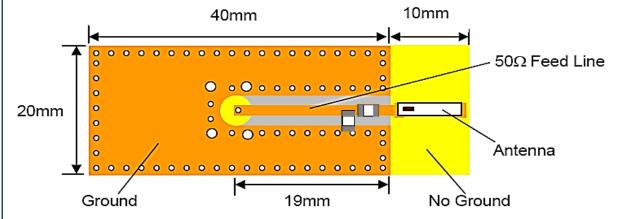
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With Matching Circuit



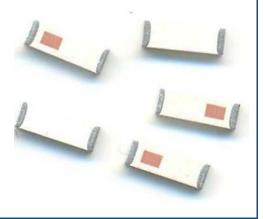
Want the layout file of the above? Send us a message at: www.johansontechnology.com/component/techquestion

To order a pre-tuned 50Ω EVB with a female SMA connector Click here:

www.johansontechnology.com/component/samplerequest

Reference p/n: 2450AT43F0100-EB1SMA

We offer 2 free layout reviews as well as antenna tuning and characterization services (lab fee may apply). Go to: www.johansontechnology.com/ipcantennaservices for more info

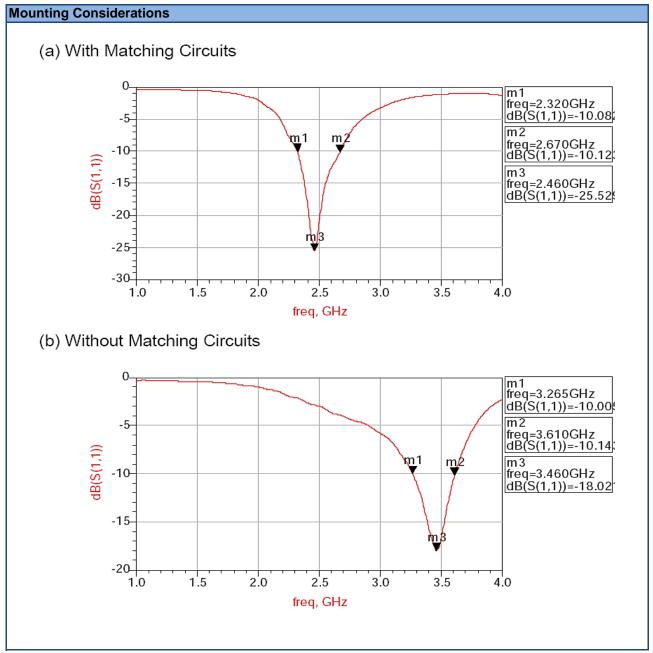




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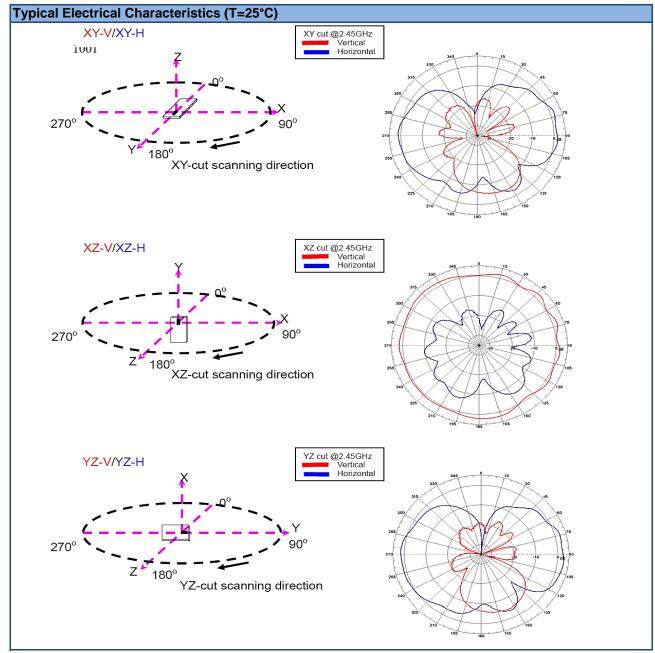




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More SMD Chip Antennas at:

www.johansontechnology.com/antennas

Packaging information

www.johansontechnology.com/ipcpackaging.html

Soldering Information

www.johansontechnology.com/ipcsoldering-profile

Antenna layout and tuning techniques (How to obtain the new antenna matching values)

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

P/N Explanation and Breakdown

www.johansontechnology.com/ipc-pn-explained

