

High Frequency Ceramic Solutions

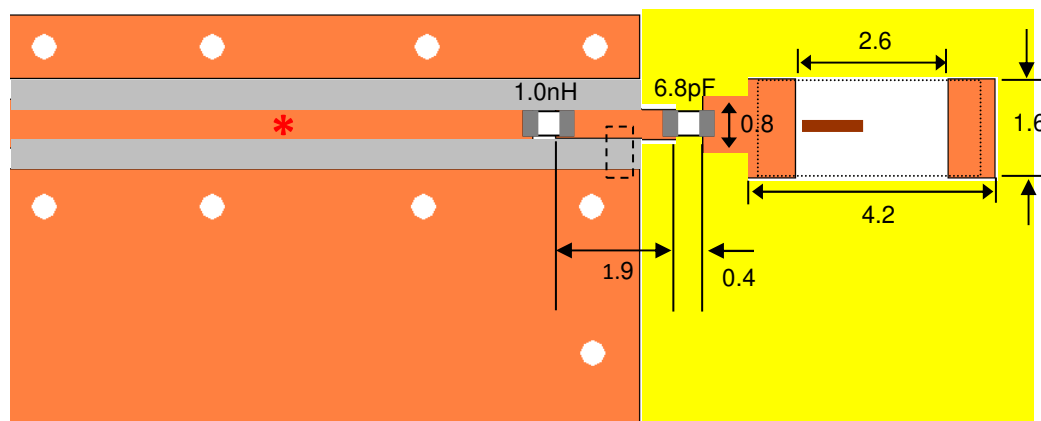
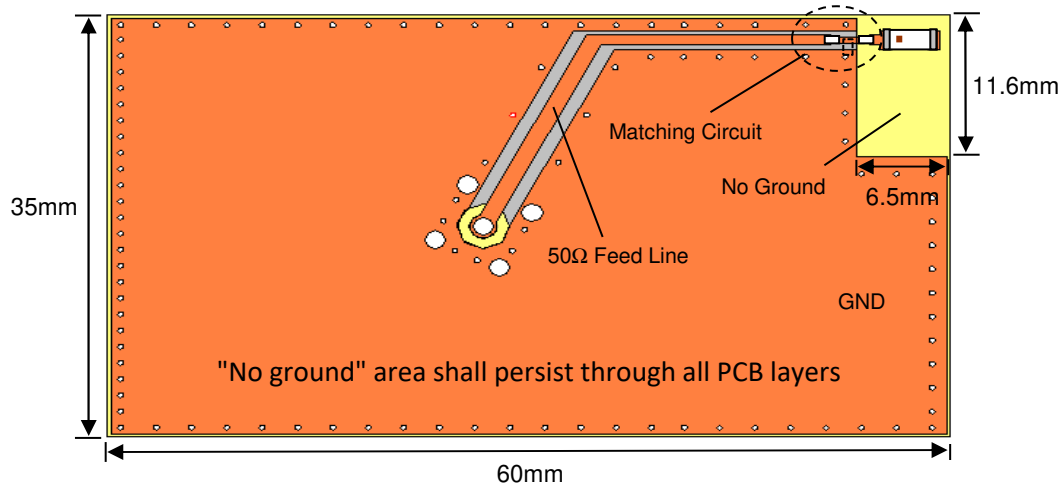
7GHz Mini UWB Antenna, AEC-Q200 Qualified

P/N 7000AT18A1600E-AEC

Detail Specification: 9/13/2021

Page 2 of 5

Mounting Considerations 1



*Line width should be designed to match 50ohm characteristic impedance, depending on PCB material and thickness. A coplanar waveguide trace is recommended for best results.

It is recommended that the designer leave available slots for a "T" (series-shunt-series) network. These particular antenna matching values are used when antenna is mounted on Johanson's evaluation board. The matching values on client's PCB will be different, just leave them empty until final assembly, then tune. Want to learn how to tune or want us to tune for you? Go to: <https://www.johansontechnology.com/ask-a-question>

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

<https://www.johansontechnology.com/request-a-sample>

Reference p/n: 7000AT18A1600-EB1SMA

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

Ver. 2.1

2021 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

7GHz Mini UWB Antenna, AEC-Q200 Qualified

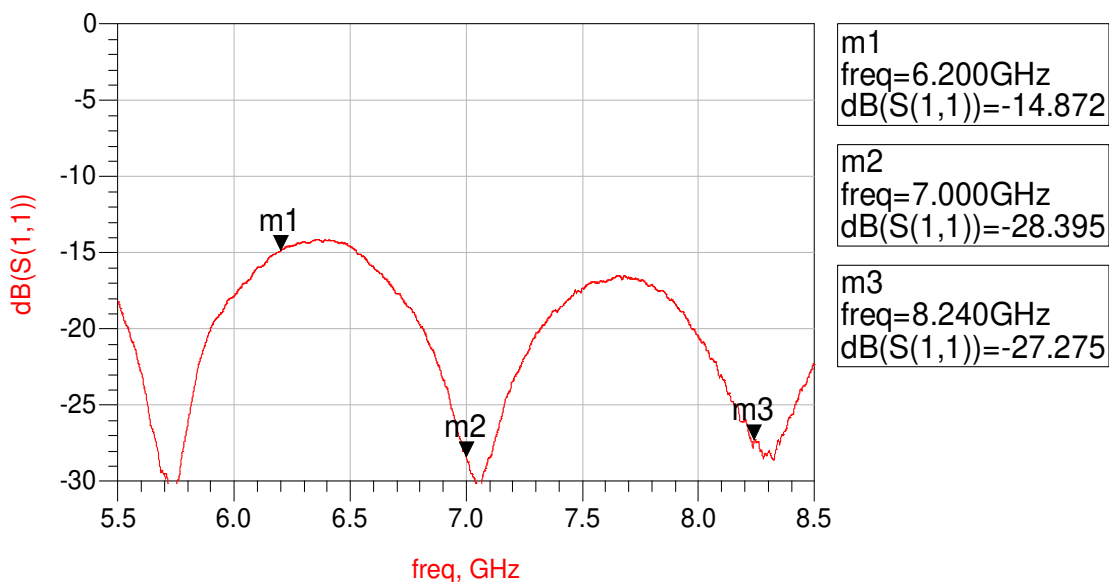
P/N 7000AT18A1600E-AEC

Detail Specification: 9/13/2021

Page 3 of 5

Typical Electrical Characteristics (T=25 °C)

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.



<https://www.johansontechnology.com>

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

Ver. 2.1

2021 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

7GHz Mini UWB Antenna, AEC-Q200 Qualified

P/N 7000AT18A1600E-AEC

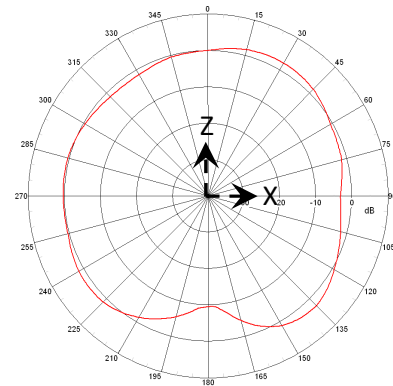
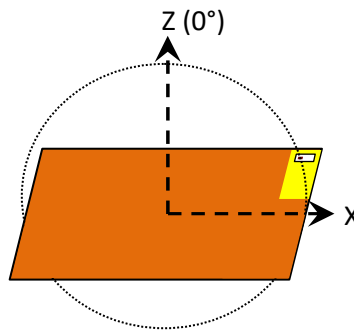
Detail Specification: 9/13/2021

Page 4 of 5

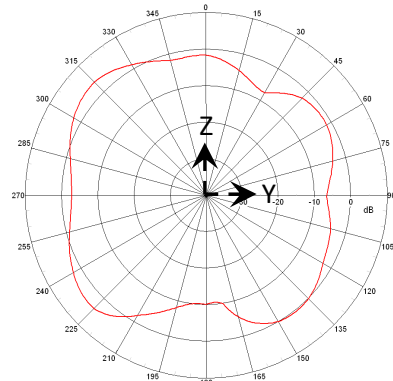
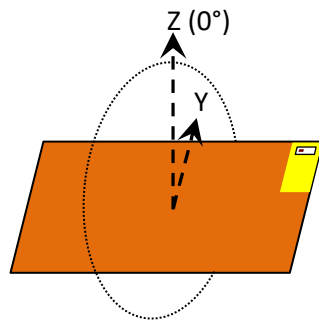
Typical Radiation Patterns (T=25 °C)

Typical 2D radiation patterns @ 7.0GHz

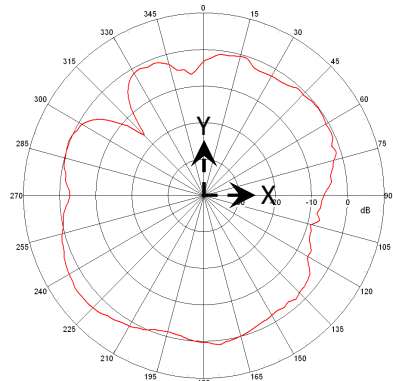
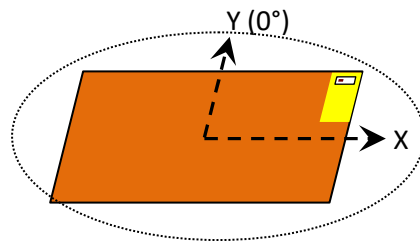
XZ-plane



YZ-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.

High Frequency Ceramic Solutions

7GHz Mini UWB Antenna, AEC-Q200 Qualified

P/N 7000AT18A1600E-AEC

Detail Specification: 9/13/2021

Page 5 of 5

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.

