# High Frequency Ceramic Solutions

**UWB Band Pass Filter, EIA 0805, High Rejection**  
**P/N 7000BP15A1600**  
**Detail Specification: 11/26/2019**  
**Page 1 of 4**

## General Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>7000BP15A1600</td>
</tr>
<tr>
<td>Frequency (MHz)</td>
<td>6200 - 7800</td>
</tr>
<tr>
<td>Impedance (Ohm)</td>
<td>50</td>
</tr>
<tr>
<td>Insertion Loss (dB)</td>
<td>1.75 typ. / 2.0 max.</td>
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<tr>
<td>Return Loss (dB)</td>
<td>12 typ. / 10 min.</td>
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<tr>
<td>Group Delay (ns)</td>
<td>0.7 typ. / 1.0 max.</td>
</tr>
<tr>
<td>ESD Susceptibility (HBM)</td>
<td>2000V</td>
</tr>
<tr>
<td>ESD Susceptibility (CDM)</td>
<td>500V</td>
</tr>
<tr>
<td>Power Capacity</td>
<td>3W max. (CW)</td>
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## Mechanical Specifications

**Dimensions (mm)**
- **L**: 13 ± 1.0
- **W**: 24 ± 1.0
- **T**: 7 ± 1.0
- **a**: 0.35 ± 0.15
- **b**: 0.35 ± 0.15
- **c**: 0.35 ± 0.15
- **d**: 0.35 ± 0.15

**Terminal Configuration**

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<tr>
<th>No.</th>
<th>Function</th>
<th>No.</th>
<th>Function</th>
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<tbody>
<tr>
<td>1</td>
<td>GND</td>
<td>2</td>
<td>IN/OUT</td>
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</table>

**Evaluation Board**
- **P/N**: 7000BP15A1600-EB1SMA
- **Suffix**: E
- **Description**: 2 Female SMA connectors 50Ω

**Recommended Storage Conditions and Period for unused T&R Product**
- **Storage Temperature**: -40 to +85°C
- **Recommended Storage Conditions**: 5% to 95%RH, 18 months max.

For more band-pass filters, go to: [https://www.johansontechnology.com/band-pass-filters](https://www.johansontechnology.com/band-pass-filters)

## Dimensional Drawings

![Dimensional Drawings](image)

If you would like the measured s-parameters, contact us at:
[https://www.johansontechnology.com/ask-a-question](https://www.johansontechnology.com/ask-a-question)

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[https://www.johansontechnology.com](https://www.johansontechnology.com)

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Mounting Considerations

Units in mm

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- Solder
- Resist
- Land
- Through-hole (⌀0.2 / ⌀0.35)

* Line width should be designed to match 50 W characteristic impedance, depending on PCB material and thickness.

Want the layout file of the above? Send us a message at: https://www.johansontechnology.com/ask-a-question

Measuring Diagram

Want the layout file of the above? Send us a message at: https://www.johansontechnology.com/ask-a-question

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Typical Electrical Characteristics (T=25°C)

Insertion Loss, Return Loss, Harmonic Attenuation

Group Delay
More BPF info such as measured s-parameters and ordering details at:

https://www.johansontechnology.com/band-pass-filter

UWB mini embedded Antennas

https://www.johansontechnology.com/antennas

Soldering Information

https://www.johansontechnology.com/ipcsoldering-profile

MSL Info

https://www.johansontechnology.com/msl-rating

Recommended Storage Condition and Max Shelf Life

https://www.johansontechnology.com/recommended-storage-conditions

RoHS Compliance

https://www.johansontechnology.com/rohs-compliance

Layout review services

https://www.johansontechnology.com/ask-a-question

Antenna layout review, tuning, and characterization services

https://www.johansontechnology.com/ipc-antenna-services

Packaging information

https://www.johansontechnology.com/tape-reel-packaging