5.53GHz Band Pass Filter, UNII-1 to UNII-4, Low Loss and High Attenuation

**Part Number:** 5532BP44A0725

### General Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>5532BP44A0725</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range (MHz)</td>
<td>5170 - 5815, 5815 - 5825, 5825 - 5835, 5835 - 5850, 5850 - 5895</td>
</tr>
<tr>
<td>Insertion loss (dB)</td>
<td>2.0 max., 2.1 max., 2.2 max., 2.4 max., 2.8 max.</td>
</tr>
<tr>
<td>Ripple (dB)</td>
<td>1.5 max., 0.5 max., 0.5 max., 0.5 max., 1.0 max.</td>
</tr>
<tr>
<td>Return Loss (dB)</td>
<td>9.5 min.</td>
</tr>
<tr>
<td>Attenuation (dB)</td>
<td>30 min. @ 30 - 1700 MHz, 30 min. @ 1277 - 1935 MHz, 30 min. @ 2400 - 2500 MHz, 15 min. @ 3453 - 3870 MHz, 30 min. @ 6105 - 6145 MHz, 45 min. @ 6145 - 7125 MHz, 45 min. @ 7235 - 7250 MHz, 45 min. @ 7250 - 7740 MHz, 36 min. @ 10340 - 11790 MHz, 10 min. @ 15510 - 17685 MHz</td>
</tr>
<tr>
<td>Power Capacity (W)</td>
<td>3 max. (CW)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40 to +85°C</td>
</tr>
<tr>
<td>Recommended Storage Conditions and Period for unused Product on T&amp;R</td>
<td>+5 to +35°C Humidity 45 - 75% RH 18 months max.</td>
</tr>
<tr>
<td>Reel Quantity (pcs./reel)</td>
<td>1,000</td>
</tr>
</tbody>
</table>

### Terminal Configuration

1. **GND**
2. **INPUT / OUTPUT**
3. **GND**
4. **INPUT / OUTPUT**

### Mechanical Dimensions

<table>
<thead>
<tr>
<th>L</th>
<th>W</th>
<th>T</th>
<th>a</th>
<th>b</th>
<th>c</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.177 ± 0.008</td>
<td>4.50 ± 0.20</td>
<td>0.087 max.</td>
<td>0.016 ± 0.008</td>
<td>0.031 ± 0.008</td>
<td>0.012 ± 0.006</td>
</tr>
<tr>
<td>0.126 ± 0.008</td>
<td>3.20 ± 0.20</td>
<td>0.40 ± 0.20</td>
<td>0.04 ± ± 0.20</td>
<td>0.80 ± 0.20</td>
<td></td>
</tr>
<tr>
<td>0.087 max.</td>
<td>2.20 max.</td>
<td>0.30 ± 0.15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You can download measured s-parameters of this component at: [https://www.johansontechnology.com/band-pass-filters](https://www.johansontechnology.com/band-pass-filters)

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https://www.johansontechnology.com
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Mounting Considerations

Mount these devices with green mark facing up.

Units in mm
- Solder Resist
- Land
- Through-hole (φ 0.3)

* Transmission line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

Would you like the layout? Send us a message at: https://www.johansontechnology.com/ask-a-question

Measuring Diagram

Port 1: Filter IN/OUT
Port 2: Filter IN/OUT

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Typical Electrical Characteristics (T=25°C)

Insertion Loss & Return loss

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P/N 5532BP44A0725

Application Notes, Layout Files, and more
https://www.johansontechnology.com/band-pass-filters

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

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

Antenna layout and tuning techniques
https://www.johansontechnology.com/tuning

Antenna layout review, tuning, and characterization services
https://www.johansontechnology.com/ipc-antenna-services