**General Specifications**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Operating Frequency</th>
<th>Insertion Loss 1 (dB)</th>
<th>Insertion Loss 2 (dB)</th>
<th>Return Loss (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0896BM15A0001</td>
<td>863 - 928 Mhz</td>
<td>1.5 dB max (-40C to +85C)</td>
<td>1.55 dB max (-40C to +125C)</td>
<td>9.5 min.</td>
</tr>
</tbody>
</table>

**Unbalanced Impedance**

- 50 Ω

**Differential Balanced Impedance**

- Impedance-Matched to T.I. CC110X, CC111X, CC113X and CC115X, CC110L, CC113L, CC115L, CC430 and RF430 Chipsets

**Attenuation (dB)**

- 25 min.@ 1726 - 1856MHz
- 35 min.@ 2589 - 2784MHz
- 35 min.@ 3452 - 3712MHz
- 35 min.@ 4315 - 4640MHz

**Recommended Storage Conditions for unused T&R product**

- +5 to +35°C
- Humidity 45~75%RH
- 18 months max.

**Power Rating**

- 1W max. (CW)

**Operating Temperature**

- -40 to +125°C

**Mechanical Dimensions**

<table>
<thead>
<tr>
<th>L</th>
<th>In</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.079 ± 0.004</td>
<td>2.00 ± 0.10</td>
</tr>
<tr>
<td>W</td>
<td>0.049 ± 0.004</td>
<td>1.25 ± 0.10</td>
</tr>
<tr>
<td>T</td>
<td>0.028 ± 0.004</td>
<td>0.70 ± 0.10</td>
</tr>
<tr>
<td>a</td>
<td>0.012 ± 0.004</td>
<td>0.30 ± 0.10</td>
</tr>
<tr>
<td>b</td>
<td>0.008 ± 0.004</td>
<td>0.20 ± 0.10</td>
</tr>
<tr>
<td>c</td>
<td>0.012 ±0.004/±008</td>
<td>0.30 ±0.1/0.2</td>
</tr>
<tr>
<td>g</td>
<td>0.014 0 0.004</td>
<td>0.35 0.10</td>
</tr>
<tr>
<td>p</td>
<td>0.026 0 0.002</td>
<td>0.65 0.05</td>
</tr>
</tbody>
</table>

**Terminal Configuration**

- Unbalanced Port
- GND
- Balanced Port
- Balanced Port
- GND
- GND

**Part Number Explanation**

<table>
<thead>
<tr>
<th>P/N Suffix</th>
<th>Packing Style</th>
<th>Termination Style</th>
<th>Evaluation Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk</td>
<td>Suffix = S</td>
<td>T &amp; R</td>
<td>50Ω SMA</td>
</tr>
<tr>
<td>T &amp; R</td>
<td>Suffix = S</td>
<td>Ag/Pt</td>
<td>50Ω SMA</td>
</tr>
<tr>
<td>E.g. 0896BM15A0001</td>
<td>Suffix = None</td>
<td>E.g. 0896BM15A0001-EBSMA</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Storage**

- 18 months max. in vacuum sealed bag and 1 week after opened. Please keep unused parts in vacuum sealed bags.

For more info go to [https://www.johansontechnology.com/silverleads-profile](https://www.johansontechnology.com/silverleads-profile).

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Mounting Considerations

* Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness. Mount device with colored mark facing up.

# Pin reference

CC11XX
CC430

Balanced
Unbalanced

0.30
0.35
0.8
1.0

Solder
Land
Through-hole (φ 0.3)

100pF (EIA 0402 or 0603) Blocking Capacitor. @ 45 or 90 deg

Pin#6 connected to ground.

Additional output filtering may be required depending on output power in order to comply with FCC and/or ETSI regulations. Mount device with colored mark facing up.

To obtain application notes, information how to implement this component, or obtain gerber files, go to:
https://www.johansontechnology.com/ti
or contact our Apps Engineering Team at:
https://www.johansontechnology.com/ask-a-question

Component P/N:
5.6nH Inductor: L-07C5N6SV6T
1.8pF Capacitor: 500R07S1R8BV4T

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**Typical Electrical Characteristics (T=25°C)**

**Insertion Loss & Return Loss (Sds11, and Sss11)**

![Graph showing dB(RL) and dB(IL) versus frequency from 0 to 10 GHz.](image)

**Amplitude & Phase Difference**

![Graph showing dif_amplitude and dif_phase versus frequency from 0.5 to 1.5 GHz.](image)

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High Frequency Ceramic Solutions


P/N 0896BM15A0001

Detail Specification: 7/22/2024

Application Notes, Layout Files, and more
https://www.johansontechnology.com/baluns

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

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