"High Frequency Ceramic Solutions"


P/N 0896BM15A0001

Detail Specification: 9/24/2013

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General Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Return Loss</th>
<th>Phase Loss</th>
<th>Phase Difference</th>
<th>Amplitude Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>0896BM15A0001</td>
<td>9.5 dB min.</td>
<td>180° ± 10</td>
<td>-40 to +125°C</td>
<td>1.5 dB max.</td>
</tr>
</tbody>
</table>

Frequency (MHz) 863 - 928 Mhz

Unbalanced Impedance 50 Ω

Differential Balanced Impedance

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

Insertion Loss 1 1.5 dB max (-40°C to +85°C)

Insertion Loss 2 1.55 dB max (-40°C to +125°C)

Attenuation (min.)

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

Power Rating

- 1W max. (CW)

Reel Quantity 4,000

Storage Conditions

- +5 ~ +35 °C, Humidity 45~75%RH

Storage Period

- 18 months max sealed. 1 week max after opened*

Moisture Sensitivity Level

1

*For more info go to www.johansontechnology.com/silverleads

Part Number Explanation

<table>
<thead>
<tr>
<th>P/N Suffix</th>
<th>Packing Style</th>
<th>Suffix = S</th>
<th>Suffix = E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk</td>
<td>eg. 0896BM15A0001S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T &amp; R</td>
<td>eg. 0896BM15A0001E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AgPt</td>
<td>eg. 0896BM15A0001(E or S)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaluation Board 0896BM15A0001-EBSMA

Mechanical Dimensions

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

Terminal Configuration

<table>
<thead>
<tr>
<th>No.</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unbalanced Port</td>
</tr>
<tr>
<td>2</td>
<td>GND</td>
</tr>
<tr>
<td>3</td>
<td>Balanced Port</td>
</tr>
<tr>
<td>4</td>
<td>Balanced Port</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
</tr>
<tr>
<td>6</td>
<td>GND</td>
</tr>
</tbody>
</table>

*For more info go to www.johansontechnology.com/silverleads

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

* 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

Mounting Considerations

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.

For an Application note as to how to implement this component and obtain gerber files, go to:
www.johansontechnology.com/ti
or contact our application team at:
www.johansontechnology.com and click on "Ask a Technical Question" Tab

Johanson Technology, Inc. reserves the right to make design changes without notice. Please confirm the specifications and delivery conditions when placing your order. All sales are subject to Johanson Technology, Inc. terms and conditions.
Typical Electrical Characteristics (T=25°C)

- **Insertion Loss & Return Loss**
- **Amplitude & Phase Difference**

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### Appearance

| Appearance | ![Image](image-url) |

### RoHS Compliance

### Packaging Information
- [www.johansontechnology.com/ipcpackaging.html](www.johansontechnology.com/ipcpackaging.html)

### Soldering Information
- [www.johansontechnology.com/ipcsoldering-profile](www.johansontechnology.com/ipcsoldering-profile)

### Antenna layout and tuning techniques
- [www.johansontechnology.com/tuning](www.johansontechnology.com/tuning)

### Antenna layout review, tuning, and characterization services
- [www.johansontechnology.com/ipcantennaservices](www.johansontechnology.com/ipcantennaservices)

### Pad metalization information
- [www.johansontechnology.com/silverleads](www.johansontechnology.com/silverleads)

### MSL Info

### Recommended Storage Condition and Max Shelf Life
- [www.johansontechnology.com/ipcstorage-shelflife](www.johansontechnology.com/ipcstorage-shelflife)

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