Twin AWS-PCS IMF for Broadcast Auxiliary Service (BAS) co-location, 4.3-10 connectors

- Provides interference mitigation in the Broadcast Auxiliary Service band of 2097.5-2109.5 MHz
- Supports dual band PCS/AWS radios with diplexed ports or diplexed single band radios
- Supports AWS1-4 and PCS bands (1695–1780, 1850–2000 & 2110–2200 MHz)
- Easy to install in existing AWS systems and prevent adjacent channel interference for BAS licensees
- New 4.3-10 connectors for improved PIM performance and size reduction
- Compact form factor with reduced size and weight
- Available in twin (IMFT-AWSBAS-43) and quad (IMFQ-AWSBAS-43) configurations

Product Classification

**Product Type**

Interference mitigation filter

General Specifications

**Color**

Gray

**Modularity**

2-Twin

**Mounting Pipe Hardware**

Band clamps (2)

**RF Connector Interface**

4.3-10 Female

**RF Connector Interface Body Style**

Long neck

Dimensions

**Height**

298 mm | 11.732 in

**Width**

204 mm | 8.031 in

**Depth**

65 mm | 2.559 in

**Ground Screw Diameter**

5 mm | 0.197 in

Outline Drawing
Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through Path   ANT port to BTS port
Lightning Surge Current     10 kA
Lightning Surge Current Waveform   8/20 waveform

Electrical Specifications

<table>
<thead>
<tr>
<th>Sub-module</th>
<th>Branch</th>
<th>License Band</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>AWS 1700, Band Pass</td>
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</tr>
</tbody>
</table>

Electrical Specifications, Band Pass

<table>
<thead>
<tr>
<th>Frequency Range, MHz</th>
<th>1695–1780</th>
<th>2110.3–2110.5</th>
<th>2110.5–2200</th>
</tr>
</thead>
<tbody>
<tr>
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<td>-------------------------------</td>
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</tr>
<tr>
<td>Insertion Loss, maximum, dB</td>
<td>0.2</td>
<td>1.8</td>
<td>1.3</td>
</tr>
<tr>
<td>Insertion Loss, typical, dB</td>
<td>0.1</td>
<td>1.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Total Group Delay, maximum, ns</td>
<td>10</td>
<td>480</td>
<td>320</td>
</tr>
<tr>
<td>Return Loss, typical, dB</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Input Power, RMS, maximum, W</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Input Power, PEP, maximum, W</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Higher Order PIM, minimum, dBC</td>
<td>-161</td>
<td>-161</td>
<td>-161</td>
</tr>
<tr>
<td>Higher Order PIM Test Method</td>
<td>2 x 20 W CW tones</td>
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<td>2 x 20 W CW tones</td>
</tr>
</tbody>
</table>

**Electrical Specifications, Band Reject**

<table>
<thead>
<tr>
<th>Frequency Range, MHz</th>
<th>2097.5–2109.5</th>
<th>2097.5–2109.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attenuation, minimum, dB</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

**Block Diagram**
Environmental Specifications

**Operating Temperature**
-40 °C to +65 °C (-40 °F to +149 °F)

**Relative Humidity**
Up to 100%

**Ingress Protection Test Method**
IEC 60529:2001, IP67

Packaging and Weights

**Included**
Mounting hardware

**Mounting Hardware Weight**
0.7 kg | 1.543 lb

**Weight, without mounting hardware**
4.1 kg | 9.039 lb