Twin Crossband Coupler, 698–788 MHz/Cellular, DC/AISG bypass on all ports

**OBSOLETE**
This product was discontinued on: December 31, 2018

Replaced By
CBC78T-DS-43
E14F05P19

CBC78T-DS-43
Twin Diplexer, 698–803/824-894 MHz, DC Sense, 4.3-10

General Specifications

<table>
<thead>
<tr>
<th>Product Family</th>
<th>CBC78</th>
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</thead>
<tbody>
<tr>
<td>Modularity</td>
<td>2-Twin</td>
</tr>
<tr>
<td>Includes</td>
<td>Mounting hardware</td>
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</tbody>
</table>

Electrical Specifications

<table>
<thead>
<tr>
<th>Sub-module</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Port Designation</td>
<td>698-787</td>
<td>824-894</td>
</tr>
<tr>
<td>License Band</td>
<td>USA 700</td>
<td>USA 750</td>
</tr>
</tbody>
</table>

Electrical Specifications, Band Pass

- **Frequency Range**
  - 698–787 MHz
  - 824–894 MHz
- **Insertion Loss, maximum**
  - 0.25 dB
  - 0.25 dB
- **Total Group Delay, maximum**
  - 25 ns
  - 25 ns
- **Return Loss, minimum**
  - 22 dB
  - 22 dB
- **Return Loss, typical**
  - 24 dB
  - 24 dB
- **Isolation, minimum**
  - 50 dB
  - 50 dB
- **Input Power, RMS, maximum**
  - 500 W
  - 500 W
- **Input Power, PEP, maximum**
  - 5000 W
  - 5000 W
- **3rd Order PIM, typical**
  - -153 dBc
  - -153 dBc
- **3rd Order PIM Test Method**
  - 2 x 20 W CW tones
  - 2 x 20 W CW tones

Product Classification

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Product Type: Coupler

**dc Power/Alarm Electrical Specifications**

- **dc/AISG Pass-through, combiner**
  - Branch 1 | Branch 2
- **dc/AISG Pass-through, demultiplexer**
  - Branch 1 | Branch 2
- **Lightning Surge Current**: 10 kA
- **Lightning Surge Current Waveform**: 8/20 waveform

**Electrical Specifications**

- **Impedance**: 50 ohm

**Block Diagram**

![Block Diagram]

**DC pass-through all ports**

**Mechanical Specifications**

- **RF Connector Interface**: 7-16 DIN Female
- **RF Connector Interface Body Style**: Long neck
- **Ground Screw Diameter**: 0.25 in
- **Color**: Gray
- **Mount Type**: Pole | Wall
- **Mounting Pipe Hardware**: Band clamps (2)
Dimensions

Height  
200.0 mm  |  7.9 in
Width  
150.0 mm  |  5.9 in
Depth  
146.0 mm  |  5.7 in
Volume  
4.4 L
Weight  
6.3 kg  |  13.9 lb

Environmental Specifications

Operating Temperature  
-40 °C to +65 °C (-40 °F to +149 °F)
Relative Humidity  
5%–100%
Ingress Protection Test Method  
IEC 60529:2001, IP67

Outline Drawing

Regulatory Compliance/Certifications

Agency  
ISO 9001:2015
Classification  
Designed, manufactured and/or distributed under this quality management system