Quad Diplexer 617-698/703-960 MHz, 4.3-10 connectors

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- Designed for network modernization application, introduction of LTE 4x4 MIMO

Product Classification

Product Type: Diplexer

General Specifications

Color: Gray
Modularity: 4-Quad
Mounting Pipe Hardware: Band clamps
RF Connector Interface: 4.3-10 Female
RF Connector Interface Body Style: Long neck

Dimensions

Height: 182 mm | 7.165 in
Width: 349 mm | 13.74 in
Depth: 128 mm | 5.039 in

Outline Drawing
Electrical Specifications

Impedance 50 ohm

License Band, Band Pass
- APT 700
- CEL 850
- CEL 900
- EDD 800
- LMR 750
- LMR 800
- LMR 900
- USA 600
- USA 700
- USA 750

Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through, combiner
- Branch 1
- Branch 2

dc/AISG Pass-through, demultiplexer
- Branch 1
- Branch 2

Lightning Surge Current 5 kA

Lightning Surge Current Waveform 8/20 waveform
Sub-module | 1 | 2 | 1 | 2
---|---|---|---|---
Branch | 1 | 2
Port Designation | Port 617-698 | Port 703-960
License Band | USA 600, Band Pass | APT 700, Band Pass
| LMR 750, Band Pass | LMR 800, Band Pass
| LMR 900, Band Pass | USA 700, Band Pass
| USA 750, Band Pass | CEL 850, Band Pass
| CEL 900, Band Pass | CEL 900, Band Pass
| EDD 800, Band Pass | 

**Electrical Specifications, Band Pass**

<table>
<thead>
<tr>
<th>Frequency Range, MHz</th>
<th>617–698</th>
<th>703–960</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss, typical, dB</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Return Loss, typical, dB</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Isolation, typical, dB</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Input Power, RMS, maximum, W</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Input Power, PEP, maximum, W</td>
<td>1200</td>
<td>1200</td>
</tr>
<tr>
<td>3rd Order PIM, typical, dBC</td>
<td>-155</td>
<td>-155</td>
</tr>
<tr>
<td>3rd Order PIM Test Method</td>
<td>2 x 20 W CW tones</td>
<td>2 x 20 W CW tones</td>
</tr>
</tbody>
</table>

**Block Diagram**

**Environmental Specifications**

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

- **Corrosion Test Method**
  IEC 60068-2-11, 30 days

- **Environmental Test Method**
  ETSI EN 300 019-1-4

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

**Packaging and Weights**

- **Volume**
  8.1 L
<table>
<thead>
<tr>
<th></th>
<th>Weight, net</th>
<th>Weight, without mounting hardware</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9.1 kg</td>
<td>8.5 kg</td>
</tr>
<tr>
<td></td>
<td>20.062 lb</td>
<td>18.739 lb</td>
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