7-16 DIN Male EZfit® for 1-5/8 in FXL-1873 and AVA7-50 cable

Product Classification

Product Type: Wireless and radiating connector
Product Brand: EZfit®
Product Series: AVA7-50 | AVA7RK-50
Ordering Note: CommScope® non-standard product

General Specifications

Body Style: Straight
Inner Contact Attachment Method: Captivated
Inner Contact Plating: Silver
Interface: 7-16 DIN Male
Mounting Angle: Straight
Outer Contact Attachment Method: Clamp
Outer Contact Plating: Trimetal
Pressurizable: No

Dimensions

Length: 71.63 mm | 2.82 in
Diameter: 62.99 mm | 2.48 in
Nominal Size: 1-5/8 in

Outline Drawing
Electrical Specifications

3rd Order IMD at Frequency  -116 dBm @ 1800 MHz
3rd Order IMD Test Method  Two +43 dBm carriers
Insertion Loss Coefficient, typical  0.05
Average Power at Frequency  3.0 kW @ 900 MHz
Cable Impedance  50 ohm
Connector Impedance  50 ohm
dc Test Voltage  4000 V
Inner Contact Resistance, maximum  1.5 mOhm
Insulation Resistance, minimum  5000 MOhm
Operating Frequency Band  0 – 2700 MHz
Outer Contact Resistance, maximum  0.8 mOhm
Peak Power, maximum  40 kW
RF Operating Voltage, maximum (vrms)  1415 V
Shielding Effectiveness  -130 dB

VSWR/Return Loss

<table>
<thead>
<tr>
<th>Frequency Band</th>
<th>VSWR</th>
<th>Return Loss (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>45–400 MHz</td>
<td>1.017</td>
<td>41.49</td>
</tr>
</tbody>
</table>
### Mechanical Specifications

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>Insertion Loss (dB)</th>
<th>Attenuation (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>401–805 MHz</td>
<td>1.029</td>
<td>36.9</td>
</tr>
<tr>
<td>806–960 MHz</td>
<td>1.038</td>
<td>34.59</td>
</tr>
<tr>
<td>961–1709 MHz</td>
<td>1.04</td>
<td>34.16</td>
</tr>
<tr>
<td>1710–2170 MHz</td>
<td>1.051</td>
<td>32.09</td>
</tr>
<tr>
<td>2170–2399 MHz</td>
<td>1.051</td>
<td>32.09</td>
</tr>
<tr>
<td>2400–2700 MHz</td>
<td>1.05</td>
<td>32.26</td>
</tr>
</tbody>
</table>

### Environmental Specifications

- **Operating Temperature**: -40 °C to +85 °C (-40 °F to +185 °F)
- **Storage Temperature**: -55 °C to +85 °C (-67 °F to +185 °F)
- **Attenuation, Ambient Temperature**: 20 °C | 68 °F
- **Average Power, Ambient Temperature**: 40 °C | 104 °F
- **Corrosion Test Method**: MIL-STD-1344A, Method 1001.1, Test Condition A
- **Immersion Depth**: 1 m
- **Immersion Test Mating**: Mated
- **Immersion Test Method**: IEC 60529:2001, IP68
- **Moisture Resistance Test Method**: MIL-STD-202F, Method 106F
- **Vibration Test Method**: IEC 60068-2-6
- **Water Jetting Test Mating**: Mated
Packaging and Weights

Weight, net 563.6 g | 1.243 lb

Regulatory Compliance/Certifications

<table>
<thead>
<tr>
<th>Agency</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHINA-ROHS</td>
<td>Below maximum concentration value</td>
</tr>
<tr>
<td>ISO 9001:2015</td>
<td>Designed, manufactured and/or distributed under this quality management system</td>
</tr>
<tr>
<td>REACH-SVHC</td>
<td>Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a></td>
</tr>
<tr>
<td>ROHS</td>
<td>Compliant</td>
</tr>
</tbody>
</table>

* Footnotes

**Insertion Loss Coefficient, typical** 0.05√freq (GHz) (not applicable for elliptical waveguide)

**Immersion Depth** Immersion at specified depth for 24 hours