Product Classification

Product Type
Wireless and radiating connector

Product Brand
EZfit®

Product Series
AVA6-50 | AVA6RK-50

Ordering Note
CommScope® non-standard product

General Specifications

Body Style
Straight

Cable Family
AVA6-50 | FXL-1480

Inner Contact Attachment Method
Captivated

Inner Contact Plating
Silver

Interface
7-16 DIN Female

Mounting Angle
Straight

Outer Contact Attachment Method
Clamp

Outer Contact Plating
Trimetal

Pressurizable
No

Dimensions

Length
61.47 mm | 2.42 in

Diameter
49.02 mm | 1.93 in

Nominal Size
1-1/4 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, typical: 0.05 dB
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 – 3300 MHz
Outer Contact Resistance, maximum: 0.8 mOhm
Peak Power, maximum: 40 kW
RF Operating Voltage, maximum (vrms): 1415 V

VSWR/Return Loss

<table>
<thead>
<tr>
<th>Frequency Band</th>
<th>VSWR</th>
<th>Return Loss (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50–1000 MHz</td>
<td>1.03</td>
<td>38</td>
</tr>
<tr>
<td>1000–1900 MHz</td>
<td>1.03</td>
<td>37</td>
</tr>
</tbody>
</table>
### Mechanical Specifications

- **Attachment Durability**: 25 cycles
- **Connector Retention Tensile Force**: 1,334.47 N | 300 lbf
- **Connector Retention Torque**: 8.14 N-m | 72.001 in lb
- **Insertion Force**: 200.17 N | 45 lbf
- **Insertion Force Method**: IEC 61169-1:15.2.4
- **Interface Durability**: 50 cycles
- **Interface Durability Method**: IEC 61169-4:9.5
- **Mechanical Shock Test Method**: IEC 60068-2-27

### 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**: IEC 60068-2-11, Test Condition Ka
- **Immersion Depth**: 1 m
- **Immersion Test Mating**: Mated
- **Immersion Test Method**: IEC 60529:2001, IP68
- **Moisture Resistance Test Method**: IEC 60529, IP68
- **Vibration Test Method**: IEC 60068-2-6
- **Water Jetting Test Mating**: Mated

### Packaging and Weights

- **Weight, net**: 284 g | 0.626 lb

### Regulatory Compliance/Certifications

- **Agency**: CHINA-ROHS
- **Classification**: Below maximum concentration value
**Footnotes**

<table>
<thead>
<tr>
<th><strong>Immersion Depth</strong></th>
<th>Immersion at specified depth for 24 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Insertion Loss, typical</strong></td>
<td>$0.05 \sqrt{\text{freq (GHz)}}$ (not applicable for elliptical waveguide)</td>
</tr>
</tbody>
</table>