

158EZNM



Type N 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

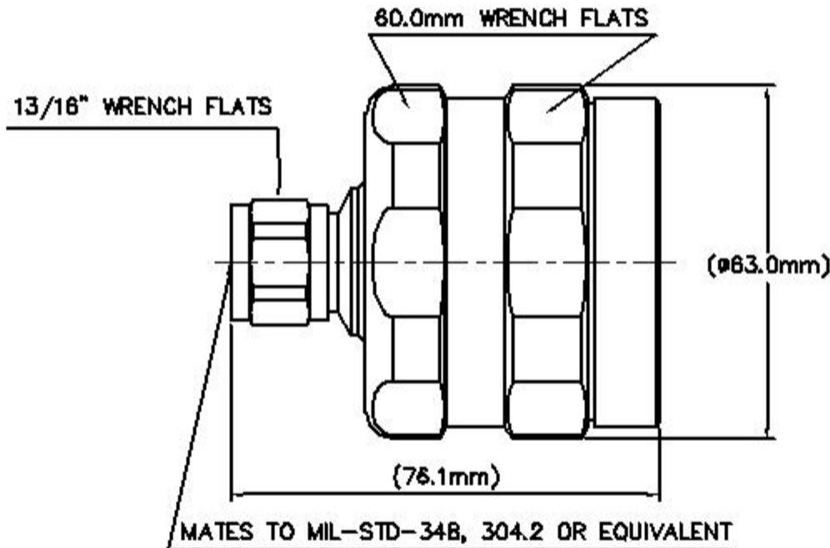
| | |
|--|------------|
| Body Style | Straight |
| Inner Contact Attachment Method | Captivated |
| Inner Contact Plating | Silver |
| Interface | N Male |
| Mounting Angle | Straight |
| Outer Contact Attachment Method | Clamp |
| Outer Contact Plating | Trimetal |
| Pressurizable | No |

Dimensions

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|---------------------|--------------------|
| Length | 76.2 mm 3 in |
| Diameter | 62.99 mm 2.48 in |
| Nominal Size | 1-5/8 in |

Outline Drawing

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Electrical Specifications

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| 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 | 0.6 kW @ 900 MHz |
| Cable Impedance | 50 ohm |
| Connector Impedance | 50 ohm |
| dc Test Voltage | 2000 V |
| Inner Contact Resistance, maximum | 2 mOhm |
| Insulation Resistance, minimum | 5000 MOhm |
| Operating Frequency Band | 0 – 2700 MHz |
| Outer Contact Resistance, maximum | 0.3 mOhm |

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|---|---------|
| Peak Power, maximum | 10 kW |
| RF Operating Voltage, maximum (vrms) | 707 V |
| Shielding Effectiveness | -130 dB |

VSWR/Return Loss

| Frequency Band | VSWR | Return Loss (dB) |
|-----------------------|-------------|-------------------------|
| 45–400 MHz | 1.01 | 46.07 |
| 401–805 MHz | 1.03 | 37.2 |
| 806–960 MHz | 1.04 | 35 |
| 961–1709 MHz | 1.06 | 30.72 |
| 1710–2170 MHz | 1.05 | 32.6 |
| 2170–2399 MHz | 1.06 | 30.72 |
| 2400–2700 MHz | 1.06 | 30.72 |

Mechanical Specifications

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|--|---|
| Attachment Durability | 25 cycles |
| Connector Retention Tensile Force | 2,224.11 N 500 lbf |
| Connector Retention Torque | 13.56 N-m 119.998 in lb |
| Coupling Nut Proof Torque | 4.52 N-m 39.997 in lb |
| Coupling Nut Retention Force | 444.82 N 100 lbf |
| Coupling Nut Retention Force Method | MIL-C-39012C-3.25, 4.6.22 |
| Insertion Force | 66.72 N 15 lbf |
| Insertion Force Method | MIL-C-39012C-3.12, 4.6.9 |
| Interface Durability | 500 cycles |
| Interface Durability Method | IEC 61169-16:9.5 |
| Mechanical Shock Test Method | MIL-STD-202F, Method 213B, Test Condition C |

Environmental Specifications

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| 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 |

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|--|---------------------------|
| 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 |
| Water Jetting Test Method | IEC 60529:2001, IP66 |

Packaging and Weights

Weight, net 550.5 g | 1.214 lb

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant |



* Footnotes

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| Immersion Depth | Immersion at specified depth for 24 hours |
| Insertion Loss, typical | $0.05\sqrt{\text{freq}}$ (GHz) (not applicable for elliptical waveguide) |