158EZNF



Type N Female 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 Female

Mounting Angle Straight

Outer Contact Attachment Method Clamp

Outer Contact Plating Trimetal

Pressurizable No

Dimensions

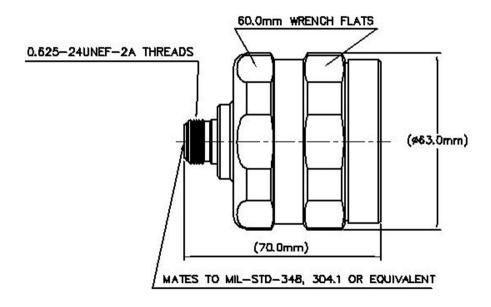
 Length
 70.1 mm | 2.76 in

 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 0.6 kW @ 900 MHz

Cable Impedance 50 ohm **Connector Impedance** 50 ohm 2000 V dc Test Voltage Inner Contact Resistance, maximum 2 m0hm Insulation Resistance, minimum 5000 MOhm **Operating Frequency Band** 0 - 2700 MHz **Outer Contact Resistance, maximum** 0.3 m0hm Peak Power, maximum 10 kW RF Operating Voltage, maximum (vrms) 707 V

VSWR/Return Loss

Shielding Effectiveness

Frequency Band VSWR Return Loss (dB)

45–400 MHz 1.017 41.49

COMMSCOPE®

-130 dB

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| 401-805 MHz | 1.027 | 37.51 |
|---------------|-------|-------|
| 806-960 MHz | 1.029 | 36.9 |
| 961-1709 MHz | 1.03 | 36.61 |
| 1710-2170 MHz | 1.04 | 34.16 |
| 2170-2399 MHz | 1.05 | 32.26 |
| 2400-2700 MHz | 1.059 | 30.86 |

Mechanical Specifications

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

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

Operating Temperature $-40 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)

Storage Temperature $-55 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ (-67 $^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)

Attenuation, Ambient Temperature $20 \, ^{\circ}\text{C} \mid 68 \, ^{\circ}\text{F}$ Average Power, Ambient Temperature $40 \, ^{\circ}\text{C} \mid 104 \, ^{\circ}\text{F}$

Corrosion Test Method MIL-STD-1344A, Method 1001.1, Test Condition A

Immersion Depth1 mImmersion Test MatingMated

Immersion Test Method IEC 60529:2001, IP68

Moisture Resistance Test Method MIL-STD-202F, Method 106F

Thermal Shock Test MethodMIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 °C

Vibration Test Method IEC 60068-2-6

Water Jetting Test Mating Mated

Water Jetting Test Method IEC 60529:2001, IP66

Packaging and Weights



158EZNF

Weight, net 536.9 g | 1.184 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 UK-ROHS Compliant

* Footnotes

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

Immersion Depth Immersion at specified depth for 24 hours

