78F7DM



7-16 DIN Male EZfit® for 7/8 in FXL-780, AVA5-50, and AVA5-50FX cable

Product Classification

Product Type Wireless and radiating connector

Product Brand EZfit®

Product Series AVA5-50 | AVA5RK-50

Ordering Note CommScope® non-standard product

General Specifications

Body Style Straight

Cable Family AVA5-50 | AVA5-50FX | FXL-780

Harmonized System (HS) Code 854420 (Coaxial cable and other coaxial electric conductors)

Inner Contact Attachment Method Captivated

Inner Contact Plating Silver

Interface 7-16 DIN Male

Mounting AngleStraightOuter Contact Attachment MethodClampOuter Contact PlatingTrimetalPressurizableNo

Dimensions

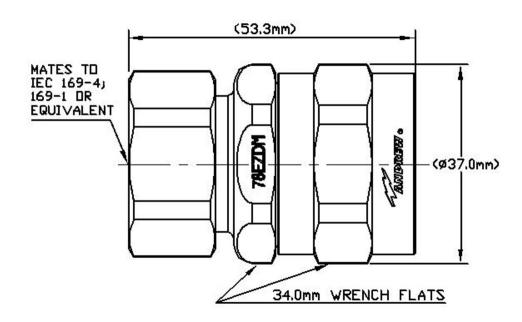
 Length
 53.34 mm | 2.1 in

 Diameter
 37.08 mm | 1.46 in

Nominal Size 7/8 in

Outline Drawing





Electrical Specifications

3rd Order IMD at Frequency -116 dBm @ 1800 MHz
3rd Order IMD Test Method Two +43 dBm carriers

Two +43 dBm carriers Insertion Loss, typical 0.05 dB 50 ohm **Cable Impedance Connector Impedance** 50 ohm dc Test Voltage 4000 V Inner Contact Resistance, maximum 0.4 m0hm Insulation Resistance, minimum 5000 MOhm **Operating Frequency Band** 0 - 5000 MHz **Outer Contact Resistance, maximum** 1.5 m0hm Peak Power, maximum 40 kW

VSWR/Return Loss

RF Operating Voltage, maximum (vrms)

Frequency Band	VSWR	Return Loss (dB)
50-1000 MHz	1.03	40
1000-1900 MHz	1.03	38
1900-2200 MHz	1.04	36

1415 V

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2200-2700 MHz	1.06	32
2700-3600 MHz	1.07	30
3600-5000 MHz	1.1	27

Mechanical Specifications

Coupling Nut Retention Force Method

Attachment Durability 25 cycles

Connector Retention Tensile Force1,334.47 N | 300 lbfConnector Retention Torque8.14 N-m | 72.001 in lbCoupling Nut Proof Torque24.86 N-m | 220.003 in lbCoupling Nut Retention Force1,000.85 N | 225 lbf

Insertion Force200.17 N | 45 lbfInsertion Force MethodIEC 61169-1:15.2.4

Interface Durability 500 cycles

Interface Durability Method IEC 61169-4:9.5

Mechanical Shock Test Method MIL-STD-202F, Method 213B, Test Condition C

MIL-C-39012C-3.25, 4.6.22

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 $20 \, ^{\circ}\text{C} \mid 68 \, ^{\circ}\text{F}$ 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

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 169.74 g | 0.374 lb

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Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value

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

Insertion Loss, typical 0.05v⁻freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours

