

# 78EZDM

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

## Product Classification

<b>Product Type</b>	Wireless and radiating connector
<b>Product Brand</b>	EZfit®
<b>Ordering Note</b>	CommScope® non-standard product

## General Specifications

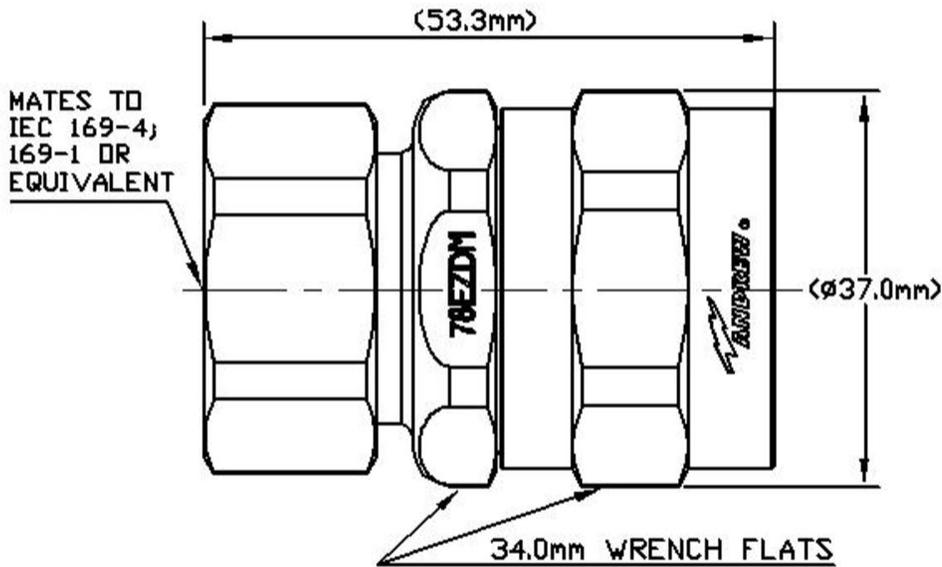
<b>Body Style</b>	Straight
<b>Cable Family</b>	AVA5-50   AVA5-50FX   FXL-780
<b>Harmonized System (HS) Code</b>	854420 (Coaxial cable and other coaxial electric conductors)
<b>Inner Contact Attachment Method</b>	Captivated
<b>Inner Contact Plating</b>	Silver
<b>Interface</b>	7-16 DIN Male
<b>Mounting Angle</b>	Straight
<b>Outer Contact Attachment Method</b>	Clamp
<b>Outer Contact Plating</b>	Trimetal
<b>Pressurizable</b>	No

## Dimensions

<b>Length</b>	2.1 in   53.34 mm
<b>Diameter</b>	1.46 in   37.084 mm
<b>Nominal Size</b>	7/8 in

## Outline Drawing

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## Electrical Specifications

<b>3rd Order IMD at Frequency</b>	-116 dBm @ 1800 MHz
<b>3rd Order IMD Test Method</b>	Two +43 dBm carriers
<b>Insertion Loss, typical</b>	0.05 dB
<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Cable Impedance</b>	50 ohm
<b>Connector Impedance</b>	50 ohm
<b>dc Test Voltage</b>	4000 V
<b>Inner Contact Resistance, maximum</b>	0.4 mOhm
<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Operating Frequency Band</b>	0 – 5000 MHz
<b>Outer Contact Resistance, maximum</b>	1.5 mOhm

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<b>Peak Power, maximum</b>	40 kW
<b>RF Operating Voltage, maximum (vrms)</b>	1415 V

## VSWR/Return Loss

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
<b>50–1000 MHz</b>	1.03	40
<b>1000–1900 MHz</b>	1.03	38
<b>1900–2200 MHz</b>	1.04	36
<b>2200–2700 MHz</b>	1.06	32
<b>2700–3600 MHz</b>	1.07	30
<b>3600–5000 MHz</b>	1.1	27

## Mechanical Specifications

<b>Attachment Durability</b>	25 cycles
<b>Connector Retention Tensile Force</b>	300 lbf   1,334.466 N
<b>Connector Retention Torque</b>	72 in lb   8.135 N-m
<b>Coupling Nut Proof Torque</b>	220 in lb   24.857 N-m
<b>Coupling Nut Retention Force</b>	225 lbf   1,000.85 N
<b>Coupling Nut Retention Force Method</b>	MIL-C-39012C-3.25, 4.6.22
<b>Insertion Force</b>	45 lbf   200.17 N
<b>Insertion Force Method</b>	IEC 61169-1:15.2.4
<b>Interface Durability</b>	500 cycles
<b>Interface Durability Method</b>	IEC 61169-4:9.5
<b>Mechanical Shock Test Method</b>	MIL-STD-202F, Method 213B, Test Condition C

## Environmental Specifications

<b>Operating Temperature</b>	-40 °C to +85 °C (-40 °F to +185 °F)
<b>Storage Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F
<b>Corrosion Test Method</b>	MIL-STD-1344A, Method 1001.1, Test Condition A
<b>Immersion Depth</b>	1 m
<b>Immersion Test Mating</b>	Mated
<b>Immersion Test Method</b>	IEC 60529:2001, IP68
<b>Moisture Resistance Test Method</b>	MIL-STD-202F, Method 106F

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<b>Vibration Test Method</b>	IEC 60068-2-6
<b>Water Jetting Test Mating</b>	Mated
<b>Water Jetting Test Method</b>	IEC 60529:2001, IP66

## Packaging and Weights

<b>Weight, net</b>	169.74 g   0.374 lb
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant



## \* Footnotes

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