

78EZDM



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 AVA5-50FX AVA5RK-50 |
| Ordering Note | CommScope® non-standard product |

General Specifications

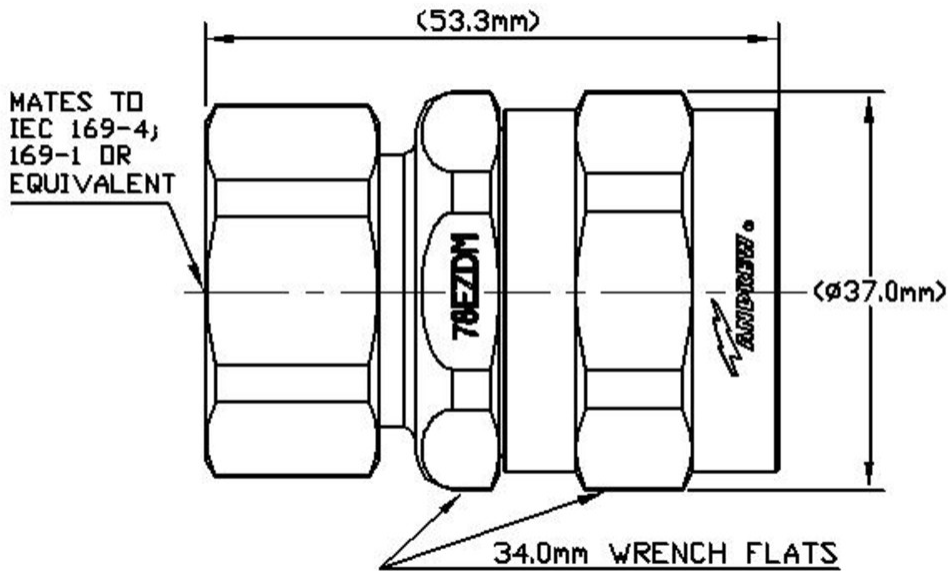
| | |
|--|--|
| Body Style | Straight |
| Cable Family | AVA5-50 AVA5-50FX FXL-780 |
| Harmonized System (HS) Code | 85366910 (Coaxial cable and other coaxial electric conductors) |
| Inner Contact Attachment Method | Captivated |
| Inner Contact Plating | Silver |
| Interface | 7-16 DIN Male |
| Mounting Angle | Straight |
| Outer Contact Attachment Method | Clamp |
| Outer Contact Plating | Trimetal |
| Pressurizable | No |

Dimensions

| | |
|---------------------|--------------------|
| Length | 53.34 mm 2.1 in |
| Diameter | 37.08 mm 1.46 in |
| Nominal Size | 7/8 in |

Outline Drawing

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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 |
| Cable Impedance | 50 ohm |
| Connector Impedance | 50 ohm |
| dc Test Voltage | 4000 V |
| Inner Contact Resistance, maximum | 0.4 mOhm |
| Insulation Resistance, minimum | 5000 MOhm |
| Operating Frequency Band | 0 – 5000 MHz |
| Outer Contact Resistance, maximum | 1.5 mOhm |
| Peak Power, maximum | 40 kW |
| RF Operating Voltage, maximum (vrms) | 1415 V |

VSWR/Return Loss

| Frequency Band | VSWR | Return Loss (dB) |
|----------------|-------|------------------|
| 50–1000 MHz | 1.02 | 40 |
| 1000–1900 MHz | 1.025 | 38 |
| 1900–2200 MHz | 1.032 | 36 |

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| | | |
|----------------------|-------|----|
| 2200–2700 MHz | 1.052 | 32 |
| 2700–3600 MHz | 1.065 | 30 |
| 3600–5000 MHz | 1.094 | 27 |

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 |
| Coupling Nut Proof Torque | 24.86 N-m 220.003 in lb |
| Coupling Nut Retention Force | 1,000.85 N 225 lbf |
| Coupling Nut Retention Force Method | MIL-C-39012C-3.25, 4.6.22 |
| Insertion Force | 200.17 N 45 lbf |
| Insertion Force Method | IEC 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 |

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 | MIL-STD-1344A, Method 1001.1, Test Condition A |
| Immersion Depth | 1 m |
| 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 | 169.74 g 0.374 lb |
|--------------------|---------------------|

78EZDM

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 |
| 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 |