

# 78EZNM

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



## Product Classification

|                     |                                  |
|---------------------|----------------------------------|
| <b>Brand</b>        | EZfit®                           |
| <b>Product Type</b> | Wireless and radiating connector |

## General Specifications

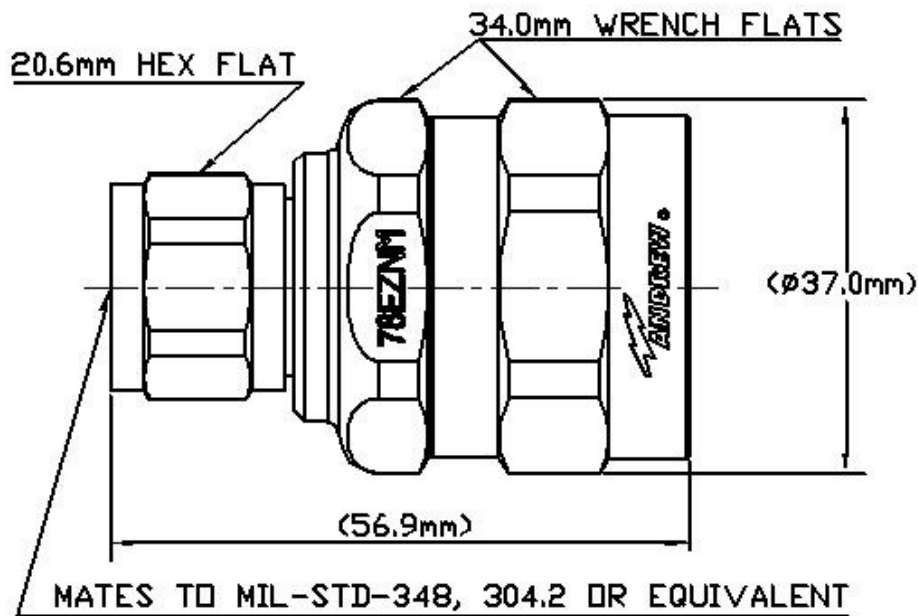
|                                    |  |
|------------------------------------|--|
| <b>Interface</b>                   | N Male   |
| <b>Body Style</b>                  | Straight   |
| <b>Harmonized System (HS) Code</b> | 854420 (Coaxial cable and other coaxial electric conductors) |
| <b>Mounting Angle</b>              | Straight   |
| <b>Ordering Note</b>               | CommScope® non-standard product                              |

## Electrical Specifications

|   |                      |
|---|----------------------|
| <b>Connector Impedance</b>                  | 50 ohm               |
| <b>Operating Frequency Band</b>             | 0 – 5000 MHz         |
| <b>Cable Impedance</b>                      | 50 ohm               |
| <b>3rd Order IMD, typical</b>               | -116 dBm @ 1800 MHz  |
| <b>3rd Order IMD Test Method</b>            | Two +43 dBm carriers |
| <b>RF Operating Voltage, maximum (vrms)</b> | 707.00 V             |
| <b>dc Test Voltage</b>                      | 2000 V               |
| <b>Outer Contact Resistance, maximum</b>    | 0.30 mOhm            |
| <b>Inner Contact Resistance, maximum</b>    | 2.00 mOhm            |
| <b>Insulation Resistance, minimum</b>       | 5000 MOhm            |
| <b>Peak Power, maximum</b>                  | 10.00 kW             |
| <b>Insertion Loss, typical</b>              | 0.05 dB              |

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## Outline Drawing



## Mechanical Specifications

|  |                           |
|--|---------------------------|
| <b>Outer Contact Attachment Method</b>     | Clamp                     |
| <b>Inner Contact Attachment Method</b>     | Captivated                |
| <b>Outer Contact Plating</b>               | Trimetal                  |
| <b>Inner Contact Plating</b>               | Silver                    |
| <b>Attachment Durability</b>               | 25 cycles                 |
| <b>Interface Durability</b>                | 500 cycles                |
| <b>Interface Durability Method</b>         | IEC 61169-16:9.5          |
| <b>Connector Retention Tensile Force</b>   | 1334 N   300 lbf          |
| <b>Connector Retention Torque</b>          | 8.13 N-m   72.00 in lb    |
| <b>Insertion Force</b>                     | 66.72 N   15.00 lbf       |
| <b>Insertion Force Method</b>              | MIL-C-39012C-3.12, 4.6.9  |
| <b>Pressurizable</b>                       | No                        |
| <b>Coupling Nut Proof Torque</b>           | 4.52 N-m   40.00 in lb    |
| <b>Coupling Nut Retention Force</b>        | 444.82 N   100.00 lbf     |
| <b>Coupling Nut Retention Force Method</b> | MIL-C-39012C-3.25, 4.6.22 |

## Dimensions

|                     |        |
|---------------------|--------|
| <b>Nominal Size</b> | 7/8 in |
|---------------------|--------|

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|                 |                    |
|-----------------|--------------------|
| <b>Diameter</b> | 37.00 mm   1.46 in |
| <b>Length</b>   | 57.96 mm   2.28 in |
| <b>Weight</b>   | 152.89 g   0.34 lb |

## 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>Immersion Depth</b>                 | 1 m  |
| <b>Immersion Test Mating</b>           | Mated  |
| <b>Immersion Test Method</b>           | IEC 60529:2001, IP68                           |
| <b>Water Jetting Test Mating</b>       | Mated  |
| <b>Water Jetting Test Method</b>       | IEC 60529:2001, IP66                           |
| <b>Moisture Resistance Test Method</b> | MIL-STD-202F, Method 106F                      |
| <b>Mechanical Shock Test Method</b>    | MIL-STD-202F, Method 213B, Test Condition C    |
| <b>Vibration Test Method</b>           | IEC 60068-2-6                                  |
| <b>Corrosion Test Method</b>           | MIL-STD-1344A, Method 1001.1, Test Condition A |

## Standard Conditions

|   |                |
|---|----------------|
| <b>Attenuation, Ambient Temperature</b>   | 20 °C   68 °F  |
| <b>Average Power, Ambient Temperature</b> | 40 °C   104 °F |

## Return Loss/VSWR

| Frequency Band | VSWR | Return Loss (dB) |
|----------------|------|------------------|
| 50–1000 MHz    | 1.02 | 40.00            |
| 1000–1900 MHz  | 1.03 | 38.00            |
| 1900–2200 MHz  | 1.04 | 35.00            |
| 2200–2700 MHz  | 1.05 | 32.00            |
| 2700–3600 MHz  | 1.07 | 30.00            |
| 3600–5000 MHz  | 1.11 | 26.00            |

## Regulatory Compliance/Certifications

| Agency                     | Classification   |
|----------------------------|--|
| RoHS 2011/65/EU            | Compliant by Exemption   |
| ISO 9001:2015              | Designed, manufactured and/or distributed under this quality management system |
| China RoHS SJ/T 11364-2014 | Above Maximum Concentration Value (MCV)  |



### \* Footnotes

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|                                |  |
|--------------------------------|--|
| <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) |