

# Product Specifications

158EZDM

7-16 DIN Male EZfit<sup>®</sup> for 1-5/8 in FXL-1873 and AVA7-50 cable



## CHARACTERISTICS

### General Specifications

---

|                |                    |
|----------------|--------------------|
| Interface      | 7-16 DIN Male      |
| Body Style     | Straight           |
| Brand          | EZfit <sup>®</sup> |
| Mounting Angle | Straight           |

### Electrical Specifications

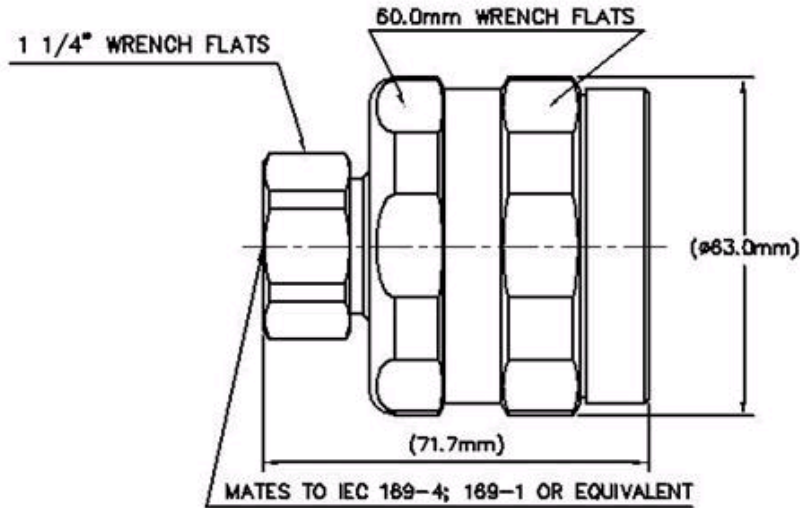
---

|                                      |                      |
|--------------------------------------|----------------------|
| Connector Impedance                  | 50 ohm               |
| Operating Frequency Band             | 0 – 2700 MHz         |
| Cable Impedance                      | 50 ohm               |
| 3rd Order IMD                        | -116 dBm @ 1800 MHz  |
| 3rd Order IMD Test Method            | Two +43 dBm carriers |
| RF Operating Voltage, maximum (vrms) | 1415.00 V            |
| dc Test Voltage                      | 4000 V               |
| Outer Contact Resistance, maximum    | 0.80 mOhm            |
| Inner Contact Resistance, maximum    | 1.50 mOhm            |
| Insulation Resistance, minimum       | 5000 MOhm            |
| Average Power                        | 3.0 kW @ 900 MHz     |
| Peak Power, maximum                  | 40.00 kW             |
| Insertion Loss, typical              | 0.05 dB              |
| Shielding Effectiveness              | -130 dB              |

# Product Specifications

158EZDM

## Outline Drawing



## Mechanical Specifications

|                                     |                           |
|-------------------------------------|---------------------------|
| Outer Contact Attachment Method     | Clamp                     |
| Inner Contact Attachment Method     | Captivated                |
| Outer Contact Plating               | Trimetal                  |
| Inner Contact Plating               | Silver                    |
| Attachment Durability               | 25 cycles                 |
| Interface Durability                | 500 cycles                |
| Interface Durability Method         | IEC 61169-4:9.5           |
| Connector Retention Tensile Force   | 2224 N   500 lbf          |
| Connector Retention Torque          | 13.56 N-m   120.00 in lb  |
| Insertion Force                     | 200.17 N   45.00 lbf      |
| Insertion Force Method              | IEC 61169-1:15.2.4        |
| Pressurizable                       | No                        |
| Coupling Nut Proof Torque           | 24.86 N-m   220.00 in lb  |
| Coupling Nut Retention Force        | 1000.85 N   225.00 lbf    |
| Coupling Nut Retention Force Method | MIL-C-39012C-3.25, 4.6.22 |

## Dimensions

|              |                    |
|--------------|--------------------|
| Nominal Size | 1-5/8 in           |
| Diameter     | 63.10 mm   2.48 in |
| Length       | 71.72 mm   2.82 in |
| Weight       | 563.60 g   1.24 lb |

# Product Specifications

158EZDM



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

## Standard Conditions

|                                    |                |
|------------------------------------|----------------|
| Attenuation, Ambient Temperature   | 20 °C   68 °F  |
| Average Power, Ambient Temperature | 40 °C   104 °F |

## Return Loss

| Frequency Band | VSWR | Return Loss (dB) |
|----------------|------|------------------|
| 45–400 MHz     | 1.02 | 41.70            |
| 401–805 MHz    | 1.03 | 37.00            |
| 806–960 MHz    | 1.04 | 34.60            |
| 961–1709 MHz   | 1.04 | 33.50            |
| 1710–2170 MHz  | 1.05 | 33.10            |
| 2170–2399 MHz  | 1.05 | 33.10            |
| 2400–2700 MHz  | 1.05 | 31.90            |

## Regulatory Compliance/Certifications

| Agency                     | Classification                          |
|----------------------------|---|
| RoHS 2002/95/EC            | Compliant by Exemption                  |
| China RoHS SJ/T 11364-2006 | Above Maximum Concentration Value (MCV) |



## \* Footnotes

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

[www.commscope.com/andrew](http://www.commscope.com/andrew)

Join the Evolution

©2010 CommScope, Inc. All rights reserved.

All trademarks identified by ® or ™ are registered trademarks or trademarks, respectively, of CommScope. All specifications are subject to change.  
See [www.commscope.com/andrew](http://www.commscope.com/andrew) for the most current information.

page 3 of 3  
6/10/2010