

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

### **Product Classification**

Product Type Wireless and radiating connector

Product Brand EZfit®

**Product Series** AVA7-50 | AVA7RK-50

Ordering Note ANDREW® non-standard product

## General Specifications

Body Style Straight

Inner Contact Attachment Method Captivated

Inner Contact Plating Silver

**Interface** 7-16 DIN Male

Mounting AngleStraightOuter Contact Attachment MethodClamp

**Outer Contact Plating** Trimetal

**Pressurizable** No

#### Dimensions

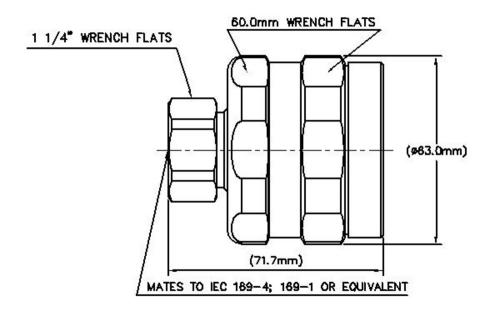
 Length
 71.63 mm | 2.82 in

 Diameter
 62.99 mm | 2.48 in

Nominal Size 1-5/8 in

### Outline Drawing





### **Electrical Specifications**

3rd Order IMD at Frequency-116 dBm @ 1800 MHz3rd Order IMD Test MethodTwo +43 dBm carriers

Insertion Loss Coefficient, typical 0.05

Average Power at Frequency 3.0 kW @ 900 MHz

Cable Impedance 50 ohm **Connector Impedance** 50 ohm dc Test Voltage 4000 V Inner Contact Resistance, maximum 1.5 m0hm Insulation Resistance, minimum 5000 MOhm **Operating Frequency Band** 0 - 2700 MHz **Outer Contact Resistance, maximum** 0.8 mOhm Peak Power, maximum 40 kW RF Operating Voltage, maximum (vrms) 1415 V

### VSWR/Return Loss

**Shielding Effectiveness** 

Frequency Band VSWR Return Loss (dB)

**45–400 MHz** 1.017 41.49



-130 dB

## 158EZDM

401-805 MHz	1.029	36.9
806-960 MHz	1.038	34.59
961-1709 MHz	1.04	34.16
1710-2170 MHz	1.051	32.09
2170-2399 MHz	1.051	32.09
2400-2700 MHz	1.05	32.26

### Mechanical Specifications

Attachment Durability 25 cycles

**Connector Retention Tensile Force** 2,224.11 N | 500 lbf

**Coupling Nut Retention Force Method** MIL-C-39012C-3.25, 4.6.22

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

### **Environmental Specifications**

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

Storage Temperature  $-55 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  (-67  $^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

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



# 158EZDM

### Packaging and Weights

**Weight, net** 563.6 g | 1.243 lb

### 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.andrew.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