

# 78EZHM



4.3-10 Male EZfit® Connector for 7/8 in AVA5-50 and AVA5-50FX cable

## Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®
Product Series	AL5-50   AVA5-50   AVA5-50FX   AVA5RK-50

## General Specifications

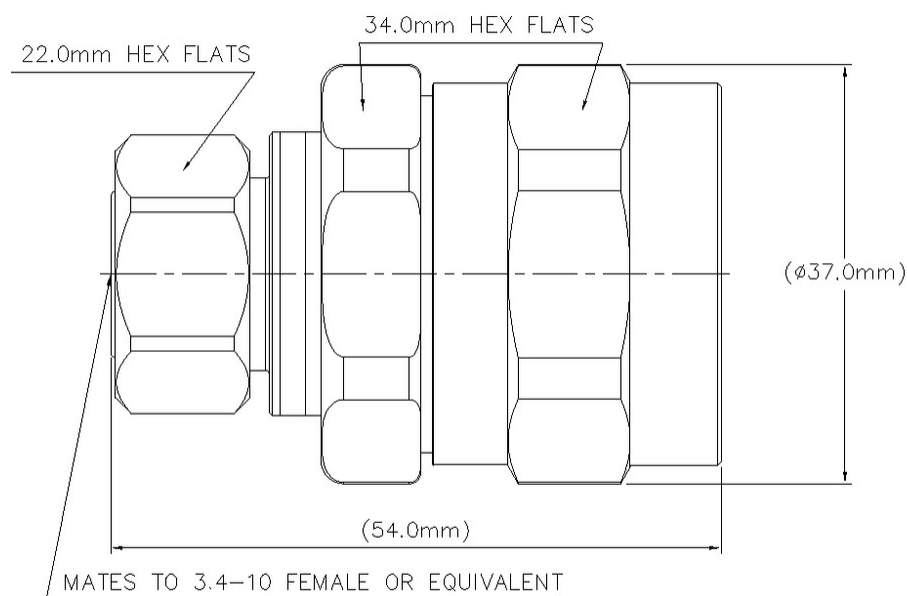
Body Style	Straight
Cable Family	AVA5-50   AVA5-50FX
Harmonized System (HS) Code	85366910 (Coaxial cable and other coaxial electric conductors)
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	4.3-10 Male
Mounting Angle	Straight
Outer Contact Attachment Method	Clamp
Outer Contact Plating	Trimetal

## Dimensions

Length	54 mm   2.126 in
Diameter	37 mm   1.457 in
Nominal Size	7/8 in

## Outline Drawing

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## Electrical Specifications

3rd Order IMD at Frequency	-116 dBm @ 900 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
Insertion Loss Coefficient, typical	0.05
Return Loss Note	Measurements taken using a .9 m (3 ft) jumper assembly
Connector Impedance	50 ohm
dc Test Voltage	2500 V
Inner Contact Resistance, maximum	1 mOhm
Insulation Resistance, minimum	5000 mOhm
Operating Frequency Band	0 – 5000 MHz
Outer Contact Resistance, maximum	1 mOhm
Peak Power, maximum	15 kW

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)	Gated VSWR	Gated Return Loss (dB)
0–1000 MHz	1.094	27	1.046	33
1000–3000 MHz	1.135	24	1.065	30

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3000–3800 MHz	1.135	24	1.065	30
3800–4200 MHz	1.152	23	1.083	28
4200–5000 MHz	1.288	18	1.173	22

## Electrical Performance

Frequency Band	Gated Return Loss (dB) apply to AVA5 and AVA5FX cable	Return Loss (dB) apply to AVA5 and AVA5FX cable	Gated Return Loss (dB) apply to AL5 cable	Return Loss (dB) apply to AL5 cable
0 - 1000 MHz	36	32	33	27
1000 - 3800 MHz	30	26	30	24
3800 - 4200 MHz	28	23	33	27
4200 - 5000 MHz	22	18	25	21

## Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	1200 N   269.771 lbf
Connector Retention Torque	7.5 N-m   66.381 in lb
Coupling Nut Proof Torque	8 N-m   70.806 in lb
Coupling Nut Proof Torque Method	IEC 61169-54:9.3.6
Coupling Nut Retention Force	450 N   101.164 lbf
Coupling Nut Retention Force Method	IEC 61169-54:9.3.11
Insertion Force	66.72 N   14.999 lbf
Insertion Force Method	IEC 60068-2-21 Method Ua2
Interface Durability	100 cycles
Interface Durability Method	IEC 61169-4:9.5
Mechanical Shock Test Method	IEC 60068-2-27

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## Environmental Specifications

Operating Temperature	-45 °C to +85 °C (-49 °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	IEC 60068-2-11
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Moisture Resistance Test Method	IEC 60068-2-3
Thermal Shock Test Method	IEC 60068-2-14
Vibration Test Method	IEC 60068-2-6
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP66

## Packaging and Weights

Height, packed	248.92 mm   9.8 in
Width, packed	266.7 mm   10.5 in
Length, packed	266.7 mm   10.5 in
Packaging quantity	50
Weight, net	149.98 g   0.331 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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## \* Footnotes

**Insertion Loss Coefficient, typical** 0.05√freq (GHz) (not applicable for elliptical waveguide)

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**Immersion Depth**

Immersion at specified depth for 24 hours