

7513045-FX



7/8" EIA EZfit® Connector for 7/8" HELIAX® Coaxial AVA5-50 and AVA5-50FX Cable

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX® Positive Stop™
Product Series	AVA5-50 AVA5-50FX AVA5RK-50

General Specifications

Body Style	Straight
Cable Family	AVA5-50
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7/8 in EIA Flange
Outer Contact Attachment Method	Clamp
Outer Contact Plating	Trimetal
Pressurizable	No

Dimensions

Length	72.5 mm 2.854 in
Diameter	56.93 mm 2.241 in
Nominal Size	7/8 in

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
Average Power at Frequency	2.3 kW @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm

7513045-FX

dc Test Voltage	6000 V
Impedance	50 ohm
Inner Contact Resistance, maximum	1.5 mOhm
Insulation Resistance, minimum	5000 mOhm
Operating Frequency Band	0 – 5000 MHz
Outer Contact Resistance, maximum	1.5 mOhm
Peak Power, maximum	90 kW
RF Operating Voltage, maximum (vrms)	2120 V
Shielding Effectiveness	130 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
50–1000 MHz	1.036	35
1700–2200 MHz	1.036	35
2400–2700 MHz	1.065	30
3400–3600 MHz	1.119	25

Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	1,334.47 N 300.001 lbf
Connector Retention Torque	8.1 N-m 71.691 in lb
Coupling Nut Proof Torque	24.86 N-m 220.03 in lb
Insertion Force	66.72 N 14.999 lbf
Insertion Force Method	IEC 61169-1:15.2.4
Interface Durability	50 cycles
Mechanical Shock Test Method	IEC 60068-2-27

Environmental Specifications

Operating Temperature	-55 °C to +85 °C (-67 °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

7513045-FX

Immersion Depth	1 m
Immersion Test Mating	Unmated
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	Unmated
Water Jetting Test Method	IEC 60529:2001, IP66

Packaging and Weights

Weight, net	341.98 g 0.754 lb
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Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
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