L4TNF-PSA



Type N Female Positive Stop™ for 1/2 in AL4RPV-50, LDF4-50A, HI 4RPV-50 cable

Product Classification

Product Type Wireless and radiating connector

Product Brand HELIAX® | Positive Stop™

Product Series LDF4-50A

Ordering Note CommScope® standard product (Global)

General Specifications

Body Style Straight
Cable Family AL4-50

Harmonized System (HS) Code 85366910 (Coaxial cable and other coaxial electric conductors)

Inner Contact Attachment Method Captivated

Inner Contact Plating Silver

InterfaceN FemaleMounting AngleStraightOuter Contact Attachment MethodRing-flareOuter Contact PlatingTrimetal

Dimensions

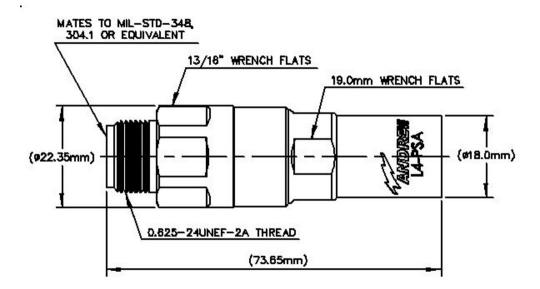
 Length
 73.66 mm | 2.9 in

 Diameter
 22.35 mm | 0.88 in

Nominal Size 1/2 in

Outline Drawing





Electrical Specifications

3rd Order IMD at Frequency -116 dBm @ 910 MHz
3rd Order IMD Test Method Two +43 dBm carriers

Insertion Loss Coefficient, typical 0.05

Average Power at Frequency 0.6 kW @ 900 MHz

Cable Impedance 50 ohm **Connector Impedance** 50 ohm 2000 V dc Test Voltage Inner Contact Resistance, maximum 2 m0hm Insulation Resistance, minimum 5000 MOhm **Operating Frequency Band** 0 - 8800 MHz **Outer Contact Resistance, maximum** 0.3 m0hm Peak Power, maximum 10 kW RF Operating Voltage, maximum (vrms) 707 V

VSWR/Return Loss

Shielding Effectiveness

Frequency Band VSWR Return Loss (dB)

50–1000 MHz 1.023 38.89

COMMSCOPE®

-130 dB

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1010-2200 MHz	1.029	36.9
2210-3000 MHz	1.046	32.96
3010-4000 MHz	1.074	28.95
4010-6000 MHz	1.119	25.01

Mechanical Specifications

Attachment Durability 25 cycles

Connector Retention Tensile Force 889.64 N | 200 lbf

Connector Retention Torque 5.42 N-m | 47.998 in lb

Insertion Force 66.72 N | 15 lbf

Insertion Force Method MIL-C-39012C-3.12, 4.6.9

Interface Durability 500 cycles

Interface Durability Method IEC 61169-16:9.5

Mechanical Shock Test Method MIL-STD-202, Method 213, Test Condition I

Environmental Specifications

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

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

Corrosion Test Method MIL-STD-1344A, Method 1001.1, Test Condition A

Immersion Depth 1 m

Immersion Test Mating Unmated

Immersion Test Method IEC 60529:2001, IP68

Moisture Resistance Test Method MIL-STD-202F, Method 106F

Thermal Shock Test Method MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 °C

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 88.46 g | 0.195 lb

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Above maximum concentration value

COMMSCOPE®

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ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

ROHS Compliant/Exempted UK-ROHS Compliant/Exempted



* Footnotes

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

Immersion Depth Immersion at specified depth for 24 hours

