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7-16 DIN Female for 2-1/4 in LDF12-50 cable

OBSOLETE

This product was discontinued on: February 12, 2015

Product Classification

Product Type Wireless and radiating connector

Product Brand HELIAX®

General Specifications

Body Style Straight

Cable Family LDF12-50

Inner Contact Attachment Method Self-tapping

Inner Contact Plating Silver

Interface 7-16 DIN Female

Mounting AngleStraightOuter Contact Attachment MethodSelf-flareOuter Contact PlatingSilverPressurizableNo

Dimensions

 Length
 139.7 mm | 5.5 in

 Diameter
 71.12 mm | 2.8 in

Nominal Size 2-1/4 in

Outline Drawing



MATES TO IEC 169-4; 169-1 OR EQUIVALENT ### Ø0.875-24 UNS-2B THD ### 2 5/8" [66.7mm] ### ACROSS FLATS ### Ø2.75 MAX ### [70.0mm] | 5.46 MAX [138.8mm]

Electrical Specifications

Insertion Loss Coefficient, typical 0.05

Average Power at Frequency 3.0 kW @ 900 MHz

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage4000 VInner Contact Resistance, maximum0.8 mOhmInsulation Resistance, minimum5000 MOhm

Operating Frequency Band 0 – 2200 MHz

Outer Contact Resistance, maximum 1.5 mOhm

Peak Power, maximum 40 kW

RF Operating Voltage, maximum (vrms) $1415 \, \text{V}$

Shielding Effectiveness -130 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45-1000 MHz	1.065	30.04
1010-1300 MHz	1.094	26.96
1310-2200 MHz	1.152	23.02

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Mechanical Specifications

Attachment Durability 25 cycles

Interface Durability 500 cycles

Interface Durability Method IEC 61169-16:9.5

Mechanical Shock Test Method MIL-STD-202F, Method 213B, Test Condition C

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 $20 \, ^{\circ}\text{C} \mid 68 \, ^{\circ}\text{F}$ 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

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

Vibration Test Method MIL-STD-202F, Method 204D, Test Condition B

Water Jetting Test Mating Mated

Water Jetting Test Method IEC 60529:2001, IP66

Packaging and Weights

Weight, net 1,542.24 g | 3.4 lb

Regulatory Compliance/Certifications

Agency Classification

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



* Footnotes

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

Immersion Depth Immersion at specified depth for 24 hours

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