L5TDF-RPC

7-16 DIN Female OnePiece™ for 7/8 in LDF5-50A cable

OBSOLETE

This product was discontinued on: December 31, 2010

Replaced By:

L5TDF-PS	7-16 DIN Female Positive Stop™ for 7/8 in LDF5-50A cable

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX® | OnePiece™

General Specifications

Body Style	Straight
Cable Family	LDF5-50A
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7-16 DIN Female
Mounting Angle	Straight
Outer Contact Attachment Method	Ball clamp
Outer Contact Plating	Trimetal
Pressurizable	No

Dimensions

Length	58.93 mm | 2.32 in
Diameter	37.34 mm | 1.47 in
Nominal Size	7/8 in

Outline Drawing

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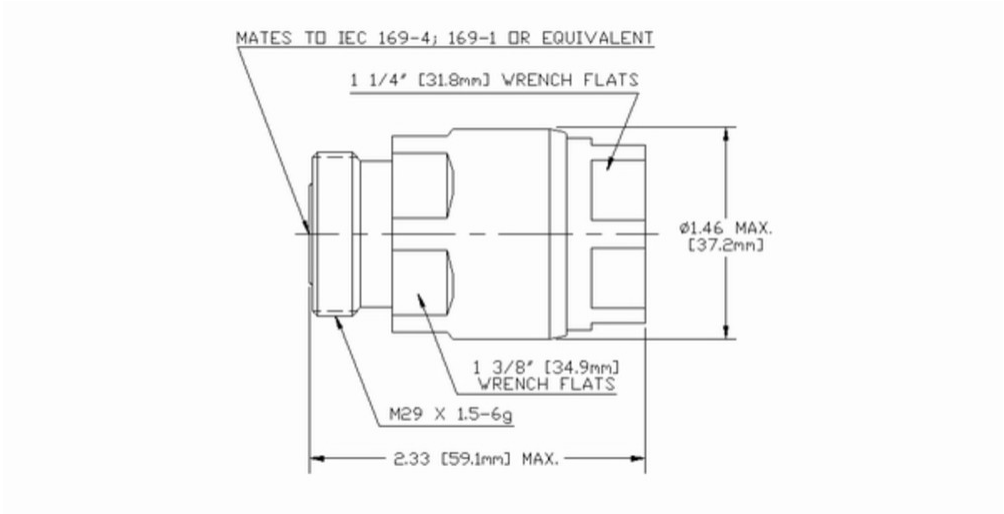

Electrical Specifications

3rd Order IMD at Frequency	-120 dBm @ 910 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
dc Test Voltage	4000 V
Inner Contact Resistance, maximum	0.8 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 5000 MHz
Outer Contact Resistance, maximum	1.5 mOhm
Peak Power, maximum	40 kW
RF Operating Voltage, maximum (vrms)	1415 V
Shielding Effectiveness	-130 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45–1000 MHz	1.023	38.89
1010–2200 MHz	1.029	36.9
2210–3000 MHz	1.036	35.05
3010–5000 MHz	1.065	30.04

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Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	889.64 N | 200 lbf
Connector Retention Torque	8.14 N-m | 72.001 in lb
Insertion Force	200.17 N | 45 lbf
Insertion Force Method	IEC 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	-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	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	177 g | 0.39 lb

* Footnotes

Insertion Loss Coefficient, typical	0.05√¯freq (GHz) (not applicable for elliptical waveguide)
Immersion Depth	Immersion at specified depth for 24 hours