

# F1TDM



7-16 DIN Male for 1/4 in FSJ1-50A cable

**OBSOLETE**

This product was discontinued on: December 31, 2010

Replaced By:

F1TDM-C	7-16 DIN Male for 1/4 in FSJ1-50A cable
F1TDM-HC	7-16 DIN Male for 1/4 in FSJ1-50A cable

## Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®

## General Specifications

Body Style	Straight
Cable Family	FSJ1-50A
Inner Contact Attachment Method	Solder
Inner Contact Plating	Silver
Interface	7-16 DIN Male
Mounting Angle	Straight
Outer Contact Attachment Method	Self-clamping
Outer Contact Plating	Trimetal
Pressurizable	No

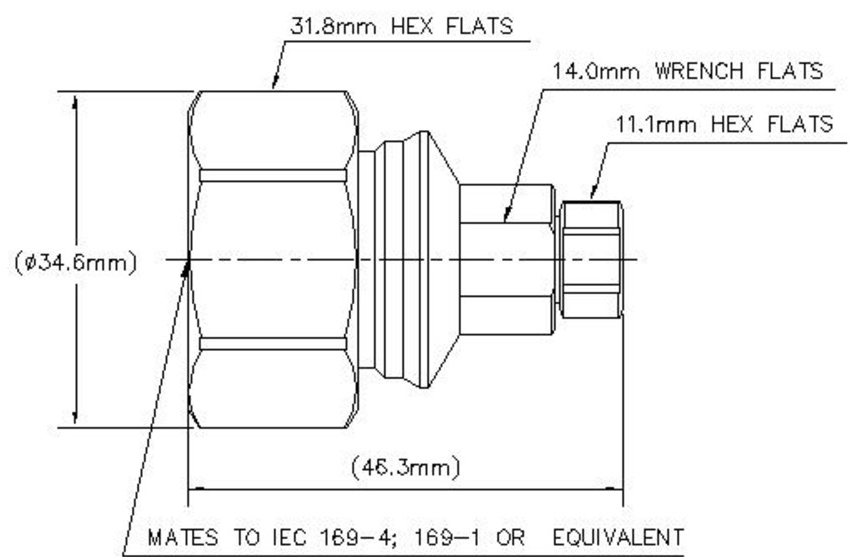
## Dimensions

Height	35.81 mm   1.41 in
Width	35.81 mm   1.41 in

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Length	46.23 mm   1.82 in
Diameter	35.81 mm   1.41 in
Nominal Size	1/4 in

## Outline Drawing



## Electrical Specifications

3rd Order IMD at Frequency	-112 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
Average Power at Frequency	0.4 kW @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	1600 V
Inner Contact Resistance, maximum	0.4 mOhm
Insulation Resistance, minimum	10000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	1.5 mOhm
Peak Power, maximum	6.4 kW
RF Operating Voltage, maximum (vrms)	565 V
Shielding Effectiveness	-110 dB

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
824–2700 MHz	1.036	35.05

## Mechanical Specifications

Connector Retention Tensile Force	449.27 N   101 lbf
Coupling Nut Proof Torque	25 N-m   221.269 in lb
Coupling Nut Proof Torque Method	IEC 61169-16:9.3.11
Coupling Nut Retention Force	1000 N   224.81 lbf
Coupling Nut Retention Force Method	IEC 61169-4:15.2.6
Insertion Force	889.64 N   200 lbf
Insertion Force Method	IEC 61169-16:9.3.5
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-4:17
Mechanical Shock Test Method	IEC 60068-2-27

## Environmental Specifications

Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-65 °C to +125 °C (-85 °F to +257 °F)
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Average Power, Inner Conductor Temperature	100 °C   212 °F
Corrosion Test Method	IEC 60068-2-11
Moisture Resistance Test Method	IEC 60068-2-3
Thermal Shock Test Method	IEC 60068-2-14
Vibration Test Method	IEC 60068-2-6

## Packaging and Weights

Weight, net	174 g   0.384 lb
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