

100PSM-CR

SMA Male for CNT-100 braided cable

Product Classification

Product Type Braided cable connector

Product Brand CNT®

General Specifications

Body Style Straight

Inner Contact Attachment Method Solder

Inner Contact Plating Gold

Interface SMA Male

Outer Contact Attachment Method Crimp

Outer Contact Plating Trimetal

Pressurizable No

Dimensions

Width 7.92 mm | 0.312 in

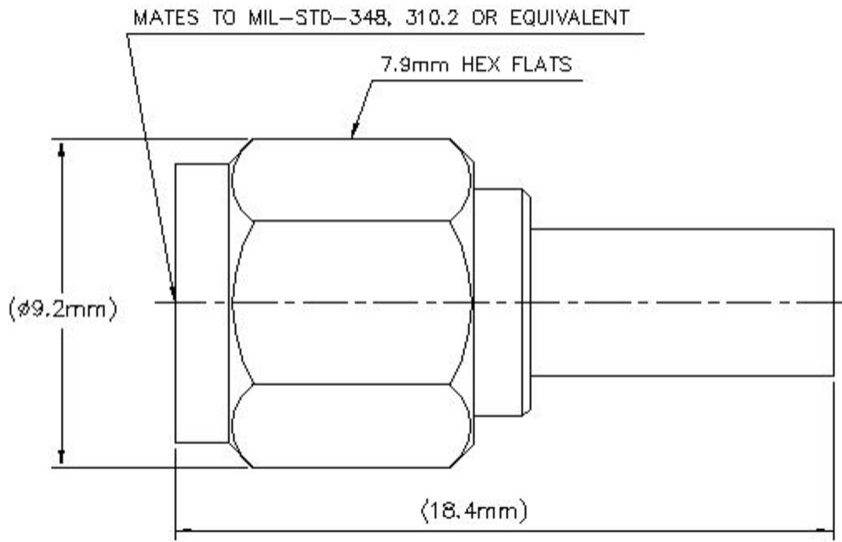
Length 18.39 mm | 0.724 in

Diameter 7.92 mm | 0.312 in

Nominal Size 0.110 in

Outline Drawing

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Electrical Specifications

Insertion Loss, typical	0.05 dB
Average Power at Frequency	50.0 W @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	500 V
Inner Contact Resistance, maximum	3 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	2.5 mOhm
Peak Power, maximum	0.6 kW
RF Operating Voltage, maximum (vrms)	173 V

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–3000 MHz	1.051	32.09
3000–6000 MHz	1.122	24.81

Mechanical Specifications

Connector Retention Tensile Force	98 N 22.031 lbf
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Coupling Nut Proof Torque	1.7 N-m 15.046 in lb
Coupling Nut Proof Torque Method	IEC 61169-15:9.3.6
Coupling Nut Retention Force	180 N 40.466 lbf
Coupling Nut Retention Force Method	IEC 61169-15:9.3.11
Insertion Force	22 N 4.946 lbf
Insertion Force Method	IEC 61169-15:9.3.5
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-15:9.5
Mechanical Shock Test Method	IEC 60068-2-27

Environmental Specifications

Operating Temperature	-40 °C to +85 °C (-40 °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
Climatic Sequence Test Method	IEC 60068-1
Corrosion Test Method	IEC 60068-2-11
Damp Heat Steady State 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	Mated
Water Jetting Test Method	IEC 60529:2001, IP65

Packaging and Weights

Weight, net	5.74 g 0.013 lb
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Regulatory Compliance/Certifications

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



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* Footnotes

Insertion Loss, typical $0.05\sqrt{\text{freq}}$ (GHz) (not applicable for elliptical waveguide)