

# RG142-NMSM-M5

RG142 Braided Jumper with interface types N Male and SMA Male, 0.5m



## Product Classification

Product Type	Braided cable assembly
Product Series	RG142

## General Specifications

Body Style, Connector A	Straight
Body Style, Connector B	Straight
Cable Family	RG142
Interface, Connector A	N Male
Interface, Connector B	SMA Male
Specification Sheet Revision Level	A

## Dimensions

Length	0.5 m   1.64 ft
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## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
700–3000 MHz	1.152	23

## Jumper Assembly Sample Label

# RG142-NMSM-M5



## Included Products

- RG142 – RG142 50 Ohm Braided Coaxial Cable
- RG142PSM-CR – SMA Male for RG142 braided cable
- RG142TNM-CR – Type N Male for RG142 braided cable

# RG142

## RG142 50 Ohm Braided Coaxial Cable



### Product Classification

Product Type	Braided coaxial cable
Product Brand	CNT®
Product Series	RG142

### General Specifications

Braid Coverage	93 %
Cable Type	RG142
Inner Shield (Braid) Coverage	94.8 %
Jacket Color	Brown
Outer Shield (Braid) Coverage	93.1 %

### Dimensions

Diameter Over Dielectric	2.95 mm   0.116 in
Diameter Over Jacket	4.95 mm   0.195 in
Inner Conductor OD	0.94 mm   0.037 in
Outer Conductor OD	4.34 mm   0.171 in
Nominal Size	0.195 in

### Electrical Specifications

Cable Impedance	50 ohm
Capacitance	96.1 pF/m   29.291 pF/ft
dc Test Voltage	2000 V
Jacket Spark Test Voltage (rms)	5000 V
Maximum Frequency	12.4 GHz

# RG142

Shielding Effectiveness	85 dB
Velocity	69 %

## Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
400.0	31	9.45
900.0	48.4	14.76
1000.0	51	15.55
1200.0	56.1	17.1
1500.0	63.5	19.36
1800.0	69.7	21.25
2000.0	74.7	22.77
2500.0	84.6	25.79
3000.0	96	29.27
8000.0	190	57.93

## Material Specifications

Braid Material	Silver plated copper
Dielectric Material	PTFE
Jacket Material	FEP
Inner Conductor Material	Silver-plated copper-clad steel wire

## Mechanical Specifications

Minimum Bend Radius, single Bend	29.718 mm   1.17 in
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## Environmental Specifications

Operating Temperature	-55 °C to +200 °C (-67 °F to +392 °F)
Fire Retardancy Test Method	IEC 60332-3-24

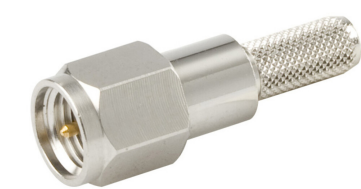
## Packaging and Weights

Packaging Type	Reel
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## Regulatory Compliance/Certifications

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

# RG142PSM-CR



SMA Male for RG142 braided cable

## Product Classification

Product Type	Braided cable connector
Product Brand	CNT®

## General Specifications

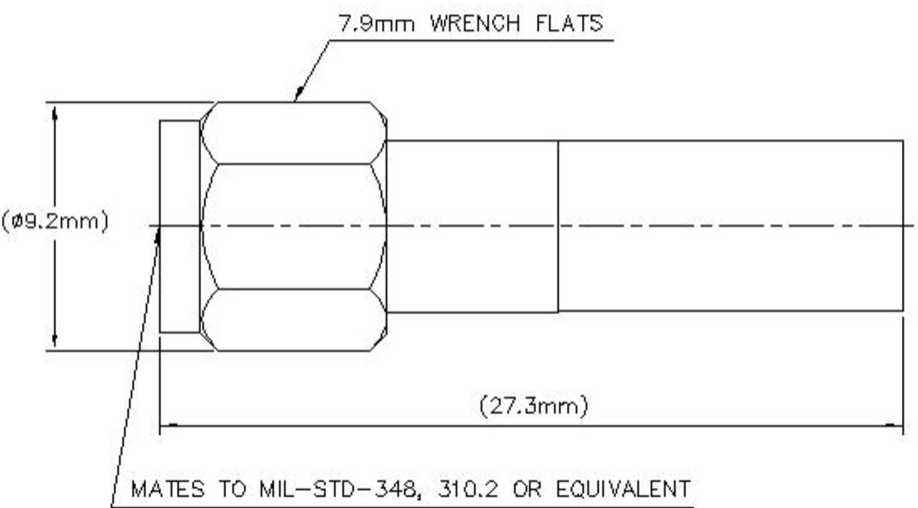
Body Style	Straight
Inner Contact Attachment Method	Solder
Inner Contact Plating	Gold
Interface	SMA Male
Outer Contact Attachment Method	Crimp
Outer Contact Plating	Trimetal
Pressurizable	No

## Dimensions

Length	27.32 mm   1.076 in
Diameter	9.15 mm   0.36 in
Nominal Size	0.195 in

## Outline Drawing

# RG142PSM-CR



## Electrical Specifications

Insertion Loss, typical	0.05 dB
Average Power at Frequency	150.0 W @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	1000 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	2.5 kW
RF Operating Voltage, maximum (vrms)	353 V

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–3000 MHz	1.052	31.93
3000–6000 MHz	1.083	28

## Mechanical Specifications

Connector Retention Tensile Force	134 N   30.124 lbf
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# RG142PSM-CR

Connector Retention Torque	0.17 N-m   1.505 in lb
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	5.2 g   0.011 lb
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## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>

# RG142PSM-CR

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ROHS	Compliant
UK-ROHS	Compliant/Exempted



\* Footnotes

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



# RG142TNM-CR



Type N Male for RG142 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	N Male
Outer Contact Attachment Method	Crimp
Outer Contact Plating	Trimetal
Pressurizable	No

## Dimensions

Height	223.5 mm   8.799 in
Length	33.32 mm   1.312 in
Diameter	22.35 mm   0.88 in
Nominal Size	0.195 in

## Electrical Specifications

Insertion Loss, typical	0.05 dB
Average Power at Frequency	150.0 W @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	1000 V
Inner Contact Resistance, maximum	1 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz

# RG142TNM-CR

Outer Contact Resistance, maximum	0.25 mOhm
Peak Power, maximum	2.5 kW
RF Operating Voltage, maximum (vrms)	353 V

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–3000 MHz	1.052	31.92
3000–6000 MHz	1.222	20.01

## Mechanical Specifications

Connector Retention Tensile Force	134 N   30.124 lbf
Connector Retention Torque	0.17 N-m   1.505 in lb
Coupling Nut Proof Torque	1.7 N-m   15.046 in lb
Coupling Nut Proof Torque Method	IEC 61169-17:9.3.6
Coupling Nut Retention Force	445 N   100.04 lbf
Coupling Nut Retention Force Method	IEC 61169-17:9.3.11
Insertion Force	4.9 N   1.102 lbf
Insertion Force Method	IEC 61169-17:9.3.5
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-17:9.5
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

# RG142TNM-CR

Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP65

## Packaging and Weights

Weight, net	31.7 g   0.07 lb
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## Regulatory Compliance/Certifications

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

## \* Footnotes

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