

244813-1M5

CNT-240 CNT® Jumper with interface types N Male and N Female, 1.5 m



OBSOLETE

Product Classification

Product Type	Braided cable assembly
Product Brand	CNT®
Product Series	CNT-240

General Specifications

Body Style, Connector A	Straight
Body Style, Connector B	Straight
Cable Family	CNT-240
Interface, Connector A	N Male
Interface, Connector B	N Female
Specification Sheet Revision Level	A

Dimensions

Length	1.5 m 4.921 ft
Nominal Size	0.240 in

Electrical Specifications

DTF, Connector A	-28 dB
DTF, Connector B	-21 dB

VSWR/Return Loss

Frequency Band

244813-1M5

0-2100 MHz

Jumper Assembly Sample Label



Regulatory Compliance/Certifications

Agency

ISO 9001:2015



Classification

Designed, manufactured and/or distributed under this quality management system

Included Products

- 240BPNM-C-CR – Type N Male for CNT-240 braided cable
- 240PTM-CR – TNC Male for CNT-240 braided cable
- CNT-240 – CNT-240, CNT® 50 Ohm Braided Coaxial Cable, black PE jacket

240BPNM-C-CR

Type N Male for CNT-240 braided cable



Product Classification

Product Type	Braided cable connector
Product Brand	CNT®

General Specifications

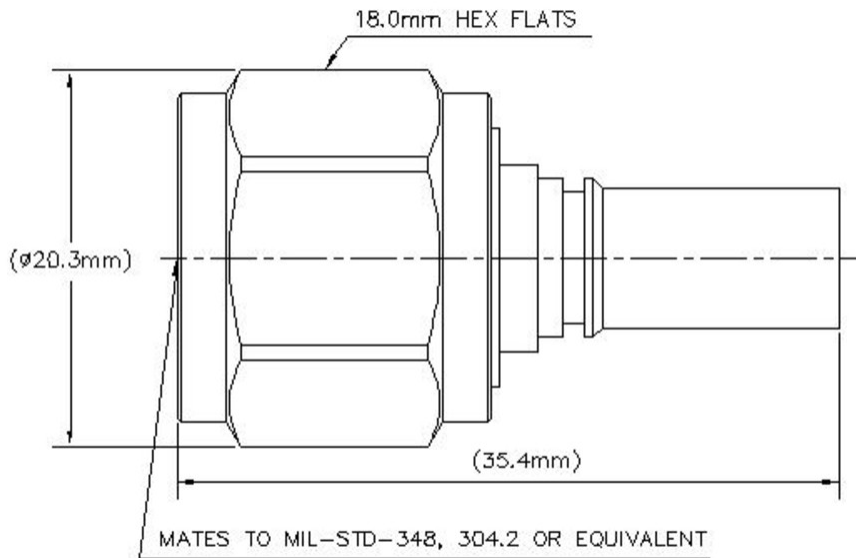
Body Style	Straight
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	N Male
Outer Contact Attachment Method	Crimp
Outer Contact Plating	Trimetal

Dimensions

Width	22.35 mm 0.88 in
Length	44.81 mm 1.764 in
Diameter	22.35 mm 0.88 in
Nominal Size	0.240 in

Outline Drawing

240BPNM-C-CR



Electrical Specifications

Insertion Loss, typical	0.05 dB
Average Power at Frequency	260.0 W @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	1500 V
Inner Contact Resistance, maximum	1 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	0.25 mOhm
Peak Power, maximum	5.6 kW
RF Operating Voltage, maximum (vrms)	529 V

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–3000 MHz	1.083	27.99
3000–6000 MHz	1.222	20.01

Mechanical Specifications

Connector Retention Tensile Force	134 N 30.124 lbf
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240BPNM-C-CR

Connector Retention Torque	0.23 N-m 2.036 in lb
Coupling Nut Proof Torque	1.7 N-m 15.046 in lb
Coupling Nut Proof Torque Method	IEC 61169-16:9.3.6
Coupling Nut Retention Force	450 N 101.164 lbf
Coupling Nut Retention Force Method	IEC 61169-16:9.3.11
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-16:9.5
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	39.12 g 0.086 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 www.commscope.com/ProductCompliance
ROHS	Compliant

240BPNM-C-CR



* Footnotes

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

240PTM-CR

TNC Male for CNT-240 braided cable

Product Classification

Product Type	Braided cable connector
Product Brand	CNT®

General Specifications

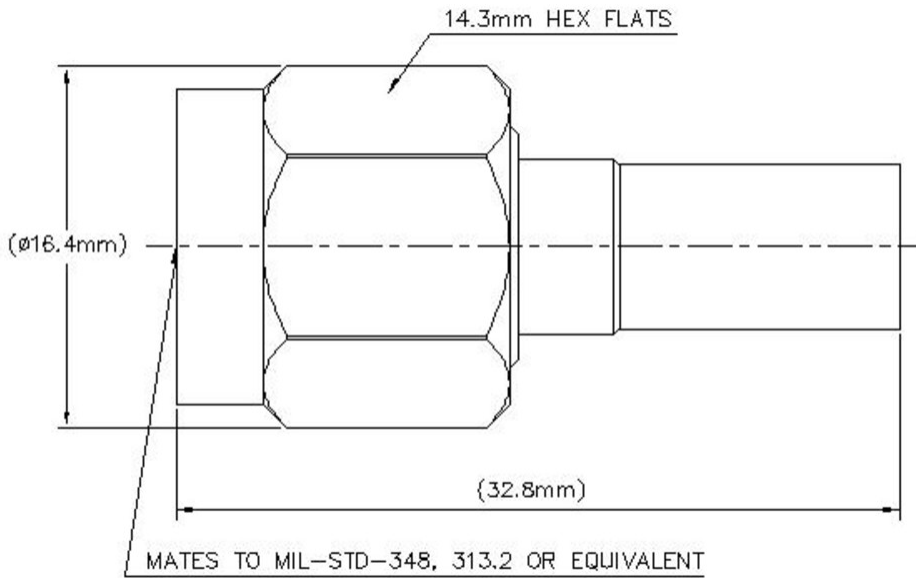
Body Style	Straight
Inner Contact Attachment Method	Solder
Inner Contact Plating	Silver
Interface	TNC Male
Outer Contact Attachment Method	Crimp
Outer Contact Plating	Trimetal
Pressurizable	No

Dimensions

Width	16.8 mm 0.661 in
Length	32.8 mm 1.291 in
Diameter	16.4 mm 0.646 in
Nominal Size	0.240 in

Outline Drawing

240PTM-CR



Electrical Specifications

Insertion Loss, typical	0.05 dB
Average Power at Frequency	260.0 W @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	1500 V
Inner Contact Resistance, maximum	1.5 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	0.4 mOhm
Peak Power, maximum	5 kW
RF Operating Voltage, maximum (vrms)	500 V

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–3000 MHz	1.105	26.05
3000–6000 MHz	1.12	24.95

Mechanical Specifications

Connector Retention Tensile Force	134 N 30.124 lbf
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24OPTM-CR

Connector Retention Torque	0.23 N-m 2.036 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	15 N 3.372 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
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP65

Packaging and Weights

Weight, net	18.07 g 0.04 lb
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Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted

24OPTM-CR



* Footnotes

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

CNT-240

CNT-240, CNT® 50 Ohm Braided Coaxial Cable, black PE jacket



Product Classification

Product Type	Braided coaxial cable
Product Brand	CNT®
Product Series	CNT-240

General Specifications

Braid Coverage	90 %
Cable Type	CNT-240
Jacket Color	Black

Dimensions

Diameter Over Dielectric	3.81 mm 0.15 in
Diameter Over Jacket	6.1 mm 0.24 in
Diameter Over Tape	3.987 mm 0.157 in
Inner Conductor OD	1.42 mm 0.056 in
Outer Conductor OD	4.52 mm 0.178 in
Nominal Size	0.240 in

Electrical Specifications

Cable Impedance	50 ohm
Capacitance	79.8 pF/m 24.323 pF/ft
dc Resistance, Inner Conductor	11.1 ohms/km 3.383 ohms/kft
dc Resistance, Outer Conductor	12.76 ohms/km 3.889 ohms/kft
dc Test Voltage	2500 V
Jacket Spark Test Voltage (rms)	2500 V

CNT-240

Maximum Frequency	31 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	5.6 kW
Shielding Effectiveness	90 dB
Velocity	83 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
30.0	4.9	1.5
50.0	6.2	1.9
150.0	10.2	3.1
220.0	12.5	3.8
450.0	17.4	5.3
900.0	24.9	7.6
1800.0	35.75	10.9
2500.0	42.31	12.9
3000.0	46.48	14.17
4000.0	53.92	16.44
4500.0	57.3	17.47
5000.0	60.51	18.45
5200.0	61.76	18.83
5500.0	63.6	19.39
5800.0	66.9	20.4
6000.0	73.82	22.5

Material Specifications

Braid Material	Tinned copper
Dielectric Material	Foam PE
Jacket Material	Non-halogenated PE
Inner Conductor Material	Copper
Shield Tape Material	Aluminum

Mechanical Specifications

Minimum Bend Radius, single Bend	19.05 mm 0.75 in
Tensile Strength	36 kg 79.366 lb

CNT-240

Bending Moment	0.3 N-m 2.655 in lb
Flat Plate Crush Strength	0.4 kg/mm 22.399 lb/in

Environmental Specifications

Installation temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)

Packaging and Weights

Cable weight	0.05 kg/m 0.034 lb/ft
Packaging Type	Reel

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant

