### C300F-SRTR

#### **Base Product**



CNT-300-FR CNT® Jumper with interface types SMA Male Right Angle and TNC Male Right Angle, variable length

#### **Product Classification**

**Product Type** Braided cable assembly

Product Brand CNT®
Product Series CNT-300

#### General Specifications

Body Style, Connector A Right angle
Body Style, Connector B Right angle
Cable Family CNT-300
Interface, Connector A SMA Male
Interface, Connector B TNC Male

Orientation 0°
Specification Sheet Revision Level A

Variable Length For custom lengths contact 828-324-2200 or 1-800-982-1708 (toll free), or your local

CommScope representative

#### **Dimensions**

 Length
 0 m | 0 ft

 Nominal Size
 0.300 in

#### VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

**700–3000 MHz** 1.433 14.99

Jumper Assembly Sample Label



### C300F-SRTR



#### Regulatory Compliance/Certifications

Agency Classification

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

#### Included Products

300APSR-C - SMA Male Right Angle for CNT-300 braided cable 300APTR-CR - TNC Male Right Angle for CNT-300 braided cable

CNT-300-FR - CNT-300-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant

polyolefin jacket, Dca s2 d2 Compliant

CNT-300A-FR - CNT-300-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant

polyolefin jacket, Dca s2 d2 Compliant



# 300APSR-C

#### SMA Male Right Angle for CNT-300 braided cable

#### **Product Classification**

Product Type Braided cable connector

Product Brand CNT®

General Specifications

Body Style Right angle
Inner Contact Attachment Method Captivated

Inner Contact Plating Gold

Interface SMA Male

 Outer Contact Attachment Method
 Clamp

 Outer Contact Plating
 Trimetal

**Pressurizable** No

**Dimensions** 

 Height
 30.82 mm | 1.213 in

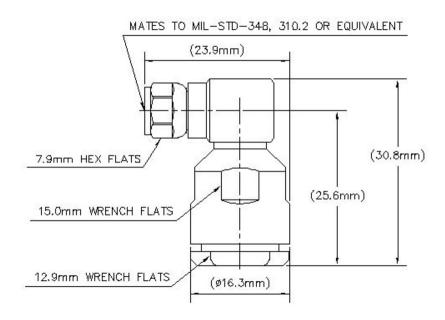
 Width
 162.5 mm | 6.398 in

 Length
 23.84 mm | 0.939 in

Nominal Size 0.300 in

Outline Drawing





#### **Electrical Specifications**

Insertion Loss, typical 0.05 dB

**Average Power at Frequency** 360.0 W @ 900 MHz

**Cable Impedance** 50 ohm 50 ohm **Connector Impedance** dc Test Voltage 1000 V Inner Contact Resistance, maximum 3 m0hm

Insulation Resistance, minimum 5000 MOhm **Operating Frequency Band** 0 - 6000 MHz 2.5 m0hm

Peak Power, maximum 5 kW RF Operating Voltage, maximum (vrms) 500 V

### VSWR/Return Loss

**Outer Contact Resistance, maximum** 

**VSWR Frequency Band** Return Loss (dB)

0-3000 MHz 1.28 18.22

Mechanical Specifications

220 N | 49.458 lbf **Connector Retention Tensile Force Connector Retention Torque** 0.45 N-m | 3.983 in lb

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### 300APSR-C

**Coupling Nut Proof Torque** 1.7 N-m | 15.046 in lb

Coupling Nut Proof Torque MethodIEC 61169-15:9.3.6Coupling Nut Retention Force180 N | 40.466 lbfCoupling Nut Retention Force MethodIEC 61169-15:9.3.11Insertion Force22 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**  $-40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$ 

**Storage Temperature**  $-65 \,^{\circ}\text{C}$  to  $+125 \,^{\circ}\text{C}$  (-85  $^{\circ}\text{F}$  to  $+257 \,^{\circ}\text{F}$ )

Attenuation, Ambient Temperature $20 \, ^{\circ}\text{C} \mid 68 \, ^{\circ}\text{F}$ Average Power, Ambient Temperature $40 \, ^{\circ}\text{C} \mid 104 \, ^{\circ}\text{F}$ Average Power, Inner Conductor Temperature $100 \, ^{\circ}\text{C} \mid 212 \, ^{\circ}\text{F}$ 

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

Thermal Shock Test Method IEC 60068-2-14

Vibration Test Method IEC 60068-2-6

Packaging and Weights

**Weight, net** 33.18 g | 0.073 lb

#### 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)



### 300APTR-CR

#### TNC Male Right Angle for CNT-300 braided cable

#### **Product Classification**

Product Type Braided cable connector

Product Brand CNT®

General Specifications

Body Style Right angle

Inner Contact Attachment MethodSolderInner Contact PlatingSilver

Interface TNC Male

Outer Contact Attachment Method Crimp

**Pressurizable** No

Dimensions

**Outer Contact Plating** 

**Height** 27.31 mm | 1.075 in

Trimetal

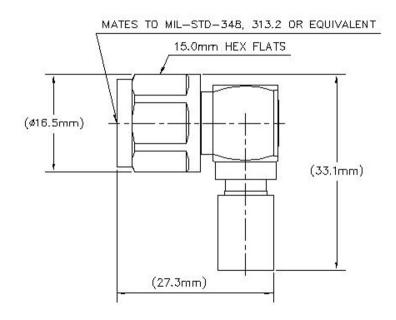
**Width** 16.5 mm | 0.65 in

**Length** 33.12 mm | 1.304 in

Nominal Size 0.300 in

Outline Drawing





#### **Electrical Specifications**

**Insertion Loss, typical** 0.05 dB

Average Power at Frequency 360.0 W @ 900 MHz

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage1500 V

Inner Contact Resistance, maximum1.5 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.4 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** 1.124 24.68

Mechanical Specifications

Connector Retention Tensile Force220 N | 49.458 lbfConnector Retention Torque0.45 N-m | 3.983 in lb

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### 300APTR-CR

**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 61169-17:17 Mechanical Shock Test Method IEC 60068-2-27

#### **Environmental Specifications**

**Operating Temperature** -40 °C to +85 °C (-40 °F to +185 °F)

-65 °C to +125 °C (-85 °F to +257 °F) **Storage Temperature** 

**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

IEC 60068-2-14 Thermal Shock Test Method **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 31.23 g | 0.069 lb

#### Regulatory Compliance/Certifications

#### Agency CHINA-ROHS Below maximum concentration value

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

**COMMSCOPE®** 

# 300APTR-CR

**UK-ROHS** 

Compliant



\* Footnotes

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



## CNT-300-FR



CNT-300-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, Dca s2 d2 Compliant

#### **Product Classification**

Product Type Braided coaxial cable

Product Brand CNT®

**Product Series** CNT-300

General Specifications

Braid Coverage 87 %
Cable Type CNT-300
Jacket Color Black

**Dimensions** 

 Diameter Over Dielectric
 4.83 mm | 0.19 in

 Diameter Over Jacket
 7.62 mm | 0.3 in

 Diameter Over Tape
 5.003 mm | 0.197 in

 Inner Conductor OD
 1.78 mm | 0.07 in

 Outer Conductor OD
 5.66 mm | 0.223 in

Nominal Size 0.300 in

**Electrical Specifications** 

**Cable Impedance** 50 ohm

**Capacitance** 80.4 pF/m | 24.506 pF/ft

dc Resistance, Inner Conductor6.96 ohms/km | 2.121 ohms/kftdc Resistance, Outer Conductor8.5 ohms/km | 2.591 ohms/kft

dc Test Voltage 2500 V

Jacket Spark Test Voltage (rms) 3500 V

**COMMSCOPE®** 

### CNT-300-FR

Maximum Frequency 24.5 GHz

Operating Frequency Band 30 - 6000 MHz

Peak Power10 kWShielding Effectiveness90 dBVelocity83 %

Material Specifications

Braid Material Tinned copper

**Dielectric Material** Foam PE

**Jacket Material** Non-halogenated, fire retardant polyolefin

Inner Conductor MaterialCopperShield Tape MaterialAluminum

Mechanical Specifications

Minimum Bend Radius, single Bend22.352 mm | 0.88 inTensile Strength55 kg | 121.254 lbBending Moment0.5 N-m | 4.425 in lb

Flat Plate Crush Strength 0.5 kg/mm | 27.999 lb/in

**Environmental Specifications** 

Installation temperature  $-40 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

Storage Temperature  $-40 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd2

Smoke Index Test Method IEC 61034

Toxicity Index Test Method IEC 60754-2

Packaging and Weights

 $\textbf{Cable weight} \hspace{1.5cm} 0.08 \text{ kg/m} \hspace{0.2cm} \mid \hspace{0.2cm} 0.054 \text{ lb/ft}$ 

Packaging Type Reel

Regulatory Compliance/Certifications

COMMSCOPE®

# CNT-300-FR

#### Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

CHINA-ROHS Below maximum concentration value

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

ROHS Compliant UK-ROHS Compliant



### CNT-300A-FR



CNT-300-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, Dca s2 d2 Compliant

#### **Product Classification**

Product Type Braided coaxial cable

Product Brand CNT®

Product Series CNT-300

General Specifications

Braid Coverage 87 %

Cable Type CNT-300

Jacket Color Black

**Dimensions** 

 Diameter Over Dielectric
 4.83 mm | 0.19 in

 Diameter Over Jacket
 7.62 mm | 0.3 in

 Diameter Over Tape
 5.003 mm | 0.197 in

 Inner Conductor OD
 1.78 mm | 0.07 in

 Outer Conductor OD
 5.66 mm | 0.223 in

Nominal Size 0.300 in

**Electrical Specifications** 

**Cable Impedance** 50 ohm

**Capacitance** 80.4 pF/m | 24.506 pF/ft

dc Resistance, Inner Conductor11.05 ohms/km | 3.368 ohms/kftdc Resistance, Outer Conductor8.5 ohms/km | 2.591 ohms/kft

dc Test Voltage 2500 V

Jacket Spark Test Voltage (rms) 3500 V

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### CNT-300A-FR

Maximum Frequency 24.5 GHz

Operating Frequency Band 30 - 6000 MHz

Peak Power10 kWShielding Effectiveness90 dBVelocity83 %

Material Specifications

Braid Material Tinned copper

Dielectric Material Foam PE

**Jacket Material** Non-halogenated, fire retardant polyolefin

Inner Conductor Material Copper-clad aluminum wire

Shield Tape Material Aluminum

Mechanical Specifications

 Minimum Bend Radius, single Bend
 22.352 mm | 0.88 in

 Tensile Strength
 23 kg | 50.706 lb

 Bending Moment
 0.5 N-m | 4.425 in lb

Flat Plate Crush Strength 0.5 kg/mm | 27.999 lb/in

**Environmental Specifications** 

Installation temperature  $-40 \, ^{\circ}\text{C to } +60 \, ^{\circ}\text{C (-40 \, ^{\circ}\text{F to } +140 \, ^{\circ}\text{F})}$  Operating Temperature  $-40 \, ^{\circ}\text{C to } +60 \, ^{\circ}\text{C (-40 \, ^{\circ}\text{F to } +140 \, ^{\circ}\text{F})}$  Storage Temperature  $-40 \, ^{\circ}\text{C to } +60 \, ^{\circ}\text{C (-40 \, ^{\circ}\text{F to } +140 \, ^{\circ}\text{F})}$ 

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd2

Smoke Index Test Method IEC 61034

Toxicity Index Test Method IEC 60754-2

Packaging and Weights

 $\textbf{Cable weight} \hspace{1.5cm} 0.07 \text{ kg/m} \hspace{0.2cm} \mid \hspace{0.2cm} 0.047 \text{ lb/ft}$ 

Packaging Type Reel

Regulatory Compliance/Certifications

COMMSC PE®

## CNT-300A-FR

#### Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

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 UK-ROHS Compliant

