

C195-NFSR



CNT-195 CNT® Jumper with interface types SMA Male Right Angle and N Female, variable length

Product Classification

| | |
|-----------------------|------------------------|
| Brand | CNT® |
| Product Series | CNT-195 |
| Product Type | Braided cable assembly |

General Specifications

| | |
|---|---|
| Body Style, Connector A | Right angle |
| Body Style, Connector B | Straight |
| Interface, Connector A | SMA Male |
| Interface, Connector B | N Female |
| Length | 0.000 m 0.000 ft |
| Nominal Size | 0.195 in |
| 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 |

Jumper Assembly Sample Label

The label contains the following information:

- Batch:** 0123456789
- Manufacturing Date (two digit year and week):** US22 1240
- Manufacturing Plant:** US22
- Product Revision:** /A
- Part Number:** F4-DMDM-2M-D
- Serial Number:** 12US220001242
- Other text:** COMMSCOPE Andrew Solutions™, 2 M (6.562 FT), SUREFLEX ASSEMBLY, U.S. PATENT 5802710, Product of UNITED STATES

A barcode is located at the bottom of the label.

Return Loss/VSWR

| Frequency Band | VSWR | Return Loss (dB) |
|----------------|------|------------------|
|----------------|------|------------------|

C195-NFSR

700–3000 MHz

1.43

15.00

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU

ISO 9001:2015

China RoHS SJ/T 11364-2014

Classification

Compliant by Exemption

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

Above Maximum Concentration Value (MCV)



Included Products

195APSR-CR — SMA Male Right Angle for CNT-195 braided cable

195PNF-CR — Type N Female for CNT-195 braided cable

CNT-195-FR — CNT-195-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, Dca s2 d2 Compliant

CNT-195-P — CNT-195, CNT® 50 Ohm Braided Coaxial Cable, white plenum CMP(ETL) C(ETL), fire retardant.

419001003/10 | CNT-195-P-6G — CNT-195, CNT® 50 Ohm Braided Coaxial Cable, white plenum CMP(ETL) C(ETL), fire retardant.

195APSR-CR

SMA Male Right Angle for CNT-195 braided cable

Product Classification

| | |
|---------------------|-------------------------|
| Brand | CNT® |
| Product Type | Braided cable connector |

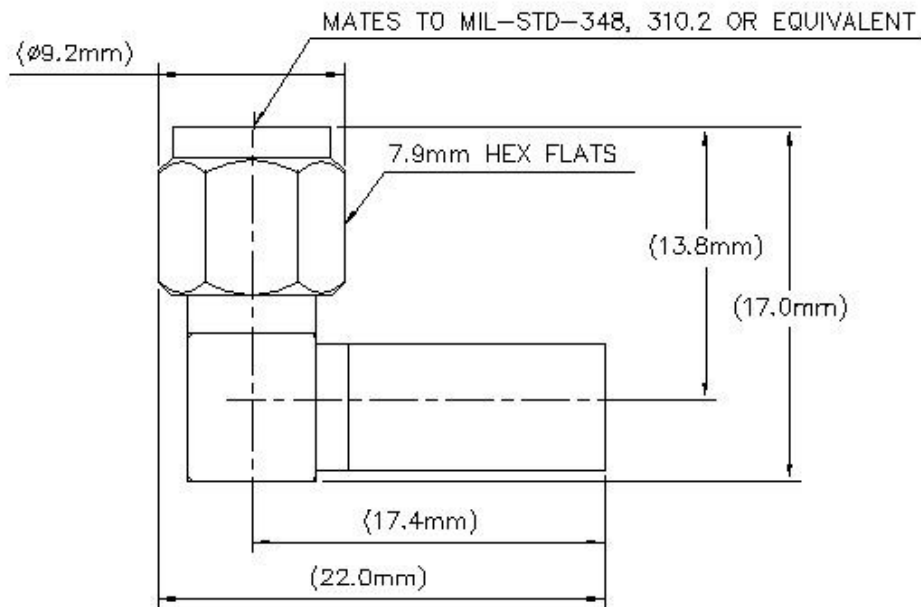
General Specifications

| | |
|-------------------|-------------|
| Interface | SMA Male |
| Body Style | Right angle |

Electrical Specifications

| | |
|---|-------------------|
| Operating Frequency Band | 0 – 6000 MHz |
| Average Power at Frequency | 150.0 W @ 900 MHz |
| Cable Impedance | 50 ohm |
| Connector Impedance | 50 ohm |
| RF Operating Voltage, maximum (vrms) | 353.00 V |
| dc Test Voltage | 1000 V |
| Outer Contact Resistance, maximum | 2.50 mOhm |
| Inner Contact Resistance, maximum | 3.00 mOhm |
| Insulation Resistance, minimum | 5000 MOhm |
| Peak Power, maximum | 2.50 kW |
| Insertion Loss, typical | 0.05 dB |

Outline Drawing



Mechanical Specifications

| | |
|--|-----------------------|
| Outer Contact Attachment Method | Crimp |
| Outer Contact Plating | Trimetal |
| Inner Contact Plating | Gold |
| Inner Contact Attachment Method | Solder |
| Interface Durability | 500 cycles |
| Interface Durability Method | IEC 61169-15:9.5 |
| Connector Retention Tensile Force | 134 N 30 lbf |
| Connector Retention Torque | 0.17 N-m 0.13 ft lb |
| Insertion Force | 22.00 N 4.95 lbf |
| Insertion Force Method | IEC 61169-15:9.3.5 |
| Pressurizable | No |
| Coupling Nut Proof Torque | 1.70 N-m 1.25 ft lb |
| Coupling Nut Proof Torque Method | IEC 61169-15:9.3.6 |
| Coupling Nut Retention Force | 180.00 N 40.47 lbf |
| Coupling Nut Retention Force Method | IEC 61169-15:9.3.11 |

Dimensions

| | |
|---------------------|----------|
| Nominal Size | 0.195 in |
|---------------------|----------|

195APSR-CR

| | |
|---------------|--------------------|
| Height | 17.00 mm 0.67 in |
| Length | 22.01 mm 0.87 in |
| Weight | 9.63 g 0.02 lb |
| Width | 7.92 mm 0.31 in |

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) |
| Water Jetting Test Mating | Mated |
| Water Jetting Test Method | IEC 60529:2001, IP65 |
| Mechanical Shock Test Method | IEC 60068-2-27 |
| Climatic Sequence Test Method | IEC 60068-1 |
| 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 |
| Corrosion Test Method | IEC 60068-2-11 |

Standard Conditions

| | |
|---|-----------------|
| Attenuation, Ambient Temperature | 20 °C 68 °F |
| Average Power, Ambient Temperature | 40 °C 104 °F |
| Average Power, Inner Conductor Temperature | 100 °C 212 °F |

Return Loss/VSWR

| Frequency Band | VSWR | Return Loss (dB) |
|-----------------------|-------------|-------------------------|
| 0–3000 MHz | 1.07 | 29.20 |

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
ISO 9001:2015
China RoHS SJ/T 11364-2014

Classification

Compliant by Exemption
Designed, manufactured and/or distributed under this quality management system
Below Maximum Concentration Value (MCV)



* Footnotes

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

195PNF-CR



Type N Female for CNT-195 braided cable

Product Classification

| | |
|---------------------|-------------------------|
| Brand | CNT® |
| Product Type | Braided cable connector |

General Specifications

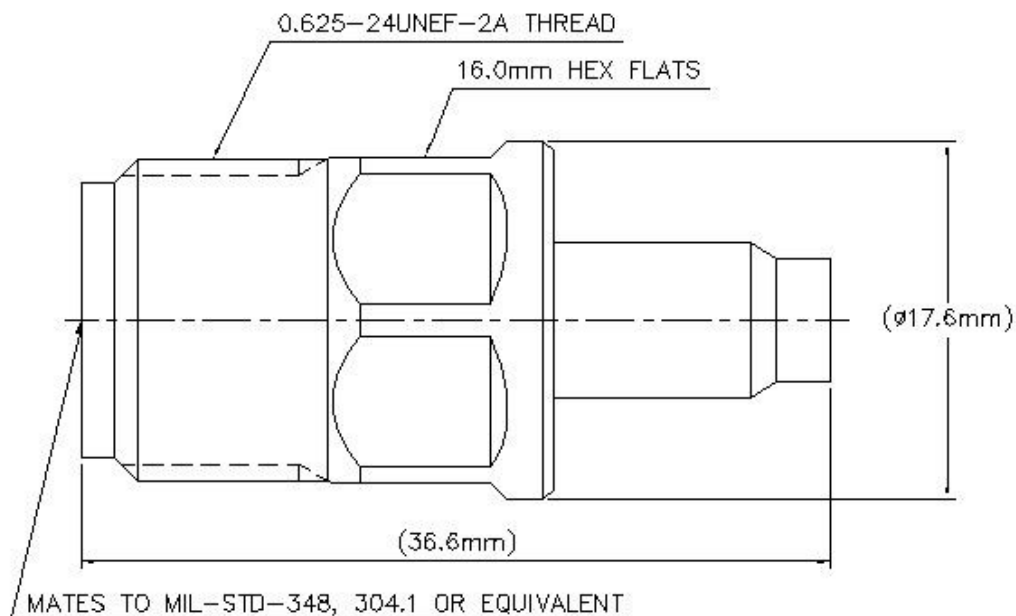
| | |
|-------------------|----------|
| Interface | N Female |
| Body Style | Straight |

Electrical Specifications

| | |
|---|--------------|
| Operating Frequency Band | 0 – 6000 MHz |
| Cable Impedance | 50 ohm |
| Connector Impedance | 50 ohm |
| RF Operating Voltage, maximum (vrms) | 353.00 V |
| dc Test Voltage | 1000 V |
| Outer Contact Resistance, maximum | 0.25 mOhm |
| Inner Contact Resistance, maximum | 1.00 mOhm |
| Insulation Resistance, minimum | 5000 MOhm |
| Peak Power, maximum | 2.50 kW |
| Insertion Loss, typical | 0.05 dB |

195PNF-CR

Outline Drawing



Mechanical Specifications

| | |
|--|-----------------------|
| Outer Contact Attachment Method | Crimp |
| Outer Contact Plating | Trimetal |
| Inner Contact Plating | Silver |
| Inner Contact Attachment Method | Solder |
| Interface Durability | 500 cycles |
| Interface Durability Method | IEC 61169-16:9.5 |
| Connector Retention Tensile Force | 134 N 30 lbf |
| Connector Retention Torque | 0.17 N-m 0.13 ft lb |

Dimensions

| | |
|---------------------|--------------------|
| Nominal Size | 0.195 in |
| Diameter | 17.60 mm 0.69 in |
| Length | 36.62 mm 1.44 in |
| Weight | 38.00 g 0.08 lb |
| Width | 17.60 mm 0.69 in |

Environmental Specifications

195PNF-CR

| | |
|---|---------------------------------------|
| Operating Temperature | -40 °C to +85 °C (-40 °F to +185 °F) |
| Storage Temperature | -65 °C to +125 °C (-85 °F to +257 °F) |
| Water Jetting Test Mating | Mated |
| Water Jetting Test Method | IEC 60529:2001, IP65 |
| Mechanical Shock Test Method | IEC 60068-2-27 |
| Climatic Sequence Test Method | IEC 60068-1 |
| 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 |
| Corrosion Test Method | IEC 60068-2-11 |

Standard Conditions

| | |
|---|-----------------|
| Attenuation, Ambient Temperature | 20 °C 68 °F |
| Average Power, Ambient Temperature | 40 °C 104 °F |
| Average Power, Inner Conductor Temperature | 100 °C 212 °F |

Return Loss/VSWR

| Frequency Band | VSWR | Return Loss (dB) |
|-----------------------|-------------|-------------------------|
| 0–3000 MHz | 1.09 | 27.00 |
| 3000–6000 MHz | 1.17 | 22.00 |

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
ISO 9001:2015
China RoHS SJ/T 11364-2014

Classification

Compliant by Exemption
Designed, manufactured and/or distributed under this quality management system
Above Maximum Concentration Value (MCV)



* Footnotes

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

CNT-195-FR

CNT-195-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, Dca s2 d2 Compliant



Product Classification

| | |
|-----------------------|-----------------------|
| Brand | CNT® |
| Product Series | CNT-195 |
| Product Type | Braided coaxial cable |

Standards And Qualifications

| | |
|------------------------------------|---------------|
| EN50575 CPR Cable EuroClass | Dca s2 d2 |
|------------------------------------|---------------|

Construction Materials

| | |
|---------------------------------|--|
| Jacket Color | Black |
| Jacket Material | Non-halogenated, fire retardant polyolefin |
| Braid Material | Tinned copper |
| Shield Tape Material | Aluminum |
| Dielectric Material | Foam PE |
| Inner Conductor Material | Copper |

Dimensions

| | |
|---------------------------------|-----------------------|
| Cable Weight | 0.03 kg/m |
| Diameter Over Dielectric | 2.790 mm 0.110 in |
| Diameter Over Jacket | 4.950 mm 0.195 in |
| Inner Conductor OD | 0.9400 mm 0.0370 in |
| Nominal Size | 0.195 in |
| Outer Conductor OD | 3.500 mm 0.138 in |

Electrical Specifications

| | |
|---------------------------------------|---------------------------------|
| Cable Impedance | 50 ohm |
| Capacitance | 79.7 pF/m 24.3 pF/ft |
| dc Resistance, Inner Conductor | 25.500 ohms/km 7.780 ohms/kft |
| dc Resistance, Outer Conductor | 16.080 ohms/km 4.900 ohms/kft |

CNT-195-FR

| | |
|---|---------------|
| dc Test Voltage | 1500 V |
| Jacket Spark Test Voltage (rms) | 3000 V |
| Maximum Frequency | 37.90 GHz |
| Operating Frequency Band | 30 – 6000 MHz |
| Peak Power | 2.5 kW |
| Shielding Effectiveness, minimum | 90 dB |
| Velocity | 75 % |

Environmental Specifications

| | |
|---------------------------------|--------------------------------------|
| Installation Temperature | -40 °C to +60 °C (-40 °F to +140 °F) |
| Operating Temperature | -40 °C to +60 °C (-40 °F to +140 °F) |
| Storage Temperature | -40 °C to +60 °C (-40 °F to +140 °F) |

General Specifications

| | |
|-----------------------|---------|
| Cable Type | CNT-195 |
| Braid Coverage | 89 % |
| Packaging Type | Reel |

Mechanical Specifications

| | |
|---|------------------------|
| Bending Moment | 0.3 N-m 0.2 ft lb |
| Flat Plate Crush Strength | 0.3 kg/mm 15.0 lb/in |
| Minimum Bend Radius, Single Bend | 12.70 mm 0.50 in |
| Smoke Index Test Method | IEC 61034 |
| Tensile Strength | 18 kg 40 lb |
| Toxicity Index Test Method | IEC 60754-2 |

Electrical Performance

| Frequency | Attenuation (dB/100 m) | Attenuation (dB/100 ft) |
|------------------|-------------------------------|--------------------------------|
| 30 MHz | 6.56 | 2.00 |
| 50 MHz | 8.53 | 2.60 |
| 150 MHz | 14.43 | 4.40 |
| 220 MHz | 17.71 | 5.40 |
| 450 MHz | 25.58 | 7.80 |
| 700 MHz | 32.05 | 9.77 |
| 800 MHz | 34.31 | 10.46 |
| 900 MHz | 36.41 | 11.10 |
| 1500 MHz | 47.79 | 14.57 |
| 1800 MHz | 52.48 | 16.00 |
| 2100 MHz | 56.84 | 17.33 |
| 2500 MHz | 62.32 | 19.00 |
| 3000 MHz | 68.58 | 20.91 |
| 4000 MHz | 79.87 | 24.35 |

| | | |
|----------|-------|-------|
| 4500 MHz | 85.05 | 25.93 |
| 5000 MHz | 89.97 | 27.43 |
| 5200 MHz | 91.87 | 28.01 |
| 5500 MHz | 94.66 | 28.86 |
| 5800 MHz | 97.42 | 29.70 |
| 6000 MHz | 99.19 | 30.24 |

* Values typical, guaranteed within 5%

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
ISO 9001:2015
China RoHS SJ/T 11364-2014
CENELEC

Classification

Compliant
Designed, manufactured and/or distributed under this quality management system
Above Maximum Concentration Value (MCV)
EN 50575 compliant, Declaration of Performance (DoP) available



CNT-195-P



CNT-195, CNT® 50 Ohm Braided Coaxial Cable, white plenum CMP(ETL) C (ETL), fire retardant.

Product Classification

| | |
|-----------------------|-----------------------|
| Brand | CNT® |
| Product Series | CNT-195 |
| Product Type | Braided coaxial cable |

Construction Materials

| | |
|---------------------------------|--------------------|
| Jacket Color | White |
| Jacket Material | Fire retardant PVC |
| Braid Material | Tinned copper |
| Shield Tape Material | Aluminum |
| Dielectric Material | Foam FEP |
| Inner Conductor Material | Copper |

Dimensions

| | |
|---------------------------------|-----------------------|
| Cable Weight | 37.00 kg/km |
| Diameter Over Dielectric | 2.790 mm 0.110 in |
| Diameter Over Jacket | 4.320 mm 0.170 in |
| Inner Conductor OD | 0.9400 mm 0.0370 in |
| Outer Conductor OD | 3.530 mm 0.139 in |

Electrical Specifications

| | |
|---|---------------------------------|
| Cable Impedance | 50 ohm |
| Capacitance | 87.2 pF/m 26.6 pF/ft |
| dc Resistance, Inner Conductor | 25.500 ohms/km 7.780 ohms/kft |
| dc Resistance, Outer Conductor | 16.080 ohms/km 4.900 ohms/kft |
| dc Test Voltage | 2000 V |
| Jacket Spark Test Voltage (rms) | 2000 V |
| Maximum Frequency | 37.90 GHz |
| Operating Frequency Band | 30 – 6000 MHz |
| Peak Power | 2.5 kW |
| Shielding Effectiveness, minimum | 90 dB |
| Velocity | 75 % |

Environmental Specifications

| | |
|---------------------------------|--------------------------------------|
| Installation Temperature | -40 °C to +75 °C (-40 °F to +167 °F) |
| Operating Temperature | -40 °C to +75 °C (-40 °F to +167 °F) |

CNT-195-P

Storage Temperature -40 °C to +75 °C (-40 °F to +167 °F)

General Specifications

Cable Type CNT-195
Braid Coverage 89 %
Packaging Type Reel

Mechanical Specifications

Bending Moment 0.1 N-m | 0.1 ft lb
Flat Plate Crush Strength 0.3 kg/mm | 15.0 lb/in
Minimum Bend Radius, Single Bend 12.70 mm | 0.50 in
Tensile Strength 18 kg | 40 lb

Electrical Performance

| Frequency | Attenuation (dB/100 m) | Attenuation (dB/100 ft) |
|-----------|------------------------|-------------------------|
| 30 MHz | 6.56 | 2.00 |
| 50 MHz | 8.20 | 2.50 |
| 150 MHz | 14.43 | 4.40 |
| 220 MHz | 17.40 | 5.30 |
| 450 MHz | 25.58 | 7.80 |
| 900 MHz | 37.79 | 11.52 |
| 1800 MHz | 56.88 | 17.34 |
| 2500 MHz | 68.95 | 21.02 |
| 3000 MHz | 76.39 | 23.29 |
| 4000 MHz | 89.90 | 27.41 |
| 4500 MHz | 96.20 | 29.33 |
| 5000 MHz | 102.80 | 31.34 |
| 5200 MHz | 105.32 | 32.11 |
| 5500 MHz | 108.50 | 33.08 |
| 5800 MHz | 112.18 | 34.20 |
| 6000 MHz | 114.41 | 34.88 |

* Values typical, guaranteed within 5%

Regulatory Compliance/Certifications

| Agency | Classification |
|----------------------------|--|
| RoHS 2011/65/EU | Compliant |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| China RoHS SJ/T 11364-2014 | Below Maximum Concentration Value (MCV) |





CNT-195, CNT® 50 Ohm Braided Coaxial Cable, white plenum CMP(ETL) C (ETL), fire retardant.

Product Classification

| | |
|-----------------------|-----------------------|
| Brand | CNT® |
| Product Series | CNT-195 |
| Product Type | Braided coaxial cable |

Construction Materials

| | |
|---------------------------------|--------------------|
| Jacket Color | White |
| Jacket Material | Fire retardant PVC |
| Braid Material | Tinned copper |
| Shield Tape Material | Aluminum |
| Dielectric Material | Foam FEP |
| Inner Conductor Material | Copper |

Dimensions

| | |
|---------------------------------|-----------------------|
| Cable Weight | 37.00 kg/km |
| Diameter Over Dielectric | 2.790 mm 0.110 in |
| Diameter Over Jacket | 4.320 mm 0.170 in |
| Inner Conductor OD | 0.9400 mm 0.0370 in |
| Outer Conductor OD | 3.530 mm 0.139 in |

Electrical Specifications

| | |
|---|---------------------------------|
| Cable Impedance | 50 ohm |
| Capacitance | 87.2 pF/m 26.6 pF/ft |
| dc Resistance, Inner Conductor | 25.400 ohms/km 7.740 ohms/kft |
| dc Resistance, Outer Conductor | 16.080 ohms/km 4.900 ohms/kft |
| dc Test Voltage | 2000 V |
| Jacket Spark Test Voltage (rms) | 2000 V |
| Maximum Frequency | 37.90 GHz |
| Operating Frequency Band | 1 – 6000 MHz |
| Peak Power | 2.5 kW |
| Shielding Effectiveness, minimum | 90 dB |
| Velocity | 75 % |

Environmental Specifications

| | |
|---------------------------------|--------------------------------------|
| Installation Temperature | -40 °C to +75 °C (-40 °F to +167 °F) |
| Operating Temperature | -40 °C to +75 °C (-40 °F to +167 °F) |

Storage Temperature -40 °C to +75 °C (-40 °F to +167 °F)

General Specifications

Cable Type CNT-195
Braid Coverage 89 %
Packaging Type Reel

Mechanical Specifications

Bending Moment 0.1 N-m | 0.1 ft lb
Flat Plate Crush Strength 0.3 kg/mm | 15.0 lb/in
Minimum Bend Radius, Single Bend 12.70 mm | 0.50 in
Tensile Strength 18 kg | 40 lb

Return Loss/VSWR

| Frequency Band | VSWR | Return Loss (dB) |
|----------------|------|------------------|
| 100–6000 MHz | 1.38 | 16.00 |

Electrical Performance

| Frequency | Attenuation (dB/100 m) | Attenuation (dB/100 ft) |
|-----------|------------------------|-------------------------|
| 30 MHz | 6.56 | 2.00 |
| 50 MHz | 8.20 | 2.50 |
| 150 MHz | 14.43 | 4.40 |
| 220 MHz | 17.40 | 5.30 |
| 450 MHz | 25.58 | 7.80 |
| 900 MHz | 37.79 | 11.52 |
| 1800 MHz | 56.88 | 17.34 |
| 2500 MHz | 68.95 | 21.02 |
| 3000 MHz | 76.39 | 23.29 |
| 4000 MHz | 89.90 | 27.41 |
| 4500 MHz | 96.20 | 29.33 |
| 5000 MHz | 102.80 | 31.34 |
| 5200 MHz | 105.32 | 32.11 |
| 5500 MHz | 108.50 | 33.08 |
| 5800 MHz | 112.18 | 34.20 |
| 6000 MHz | 114.41 | 34.88 |

* Values typical, guaranteed within 5%

Regulatory Compliance/Certifications

| Agency | Classification |
|----------------------------|--|
| RoHS 2011/65/EU | Compliant |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| China RoHS SJ/T 11364-2014 | Above Maximum Concentration Value (MCV) |

