

7796A Coax - RG-59/U

For more Information
please call

1-800-Belden1



Description:

RG-59/U type, 20 AWG solid .032" bare copper conductors, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), overall PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

| # Coax | AWG | Stranding | Conductor Material | Dia. (in.) |
|--------|-----|-----------|--------------------|------------|
| 5 | 20 | Solid | BC - Bare Copper | .032 |

Insulation

Insulation Material:

| Insulation Material | Dia. (in.) |
|---|------------|
| Gas-injected FHDPE - Foam High Density Polyethylene | .145 |

Inner Shield

Inner Shield Material:

| Layer # | Inner Shield Trade Name | Type | Inner Shield Material | Coverage (%) |
|---------|-------------------------|-------|--|--------------|
| 1 | Duofoil® | Tape | Aluminum Foil-Polyester Tape-Aluminum Foil | 100 |
| 2 | | Braid | TC - Tinned Copper | 95 |

Inner Jacket

Inner Jacket Material:

| Inner Jacket Material | Nom. Dia. (in.) |
|--------------------------|-----------------|
| PVC - Polyvinyl Chloride | .235 |

Inner Jacket Color Code Chart:

| Number | Color |
|--------|--------|
| 1 | Red |
| 2 | Green |
| 3 | Blue |
| 4 | White |
| 5 | Yellow |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Material |
|--------------------------|
| PVC - Polyvinyl Chloride |

Overall Cable

Overall Nominal Diameter: 0.790 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -35°C To +75°C

UL Temperature Rating: 60°C

Non-UL Temperature Rating: 75°C

Bulk Cable Weight: 274 lbs/1000 ft.

Max. Recommended Pulling Tension: 360 lbs.

Min. Bend Radius (Install)/Minor Axis: 8 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| | |
|---------------------------------------|------------|
| NEC/(UL) Specification: | CMR |
| CEC/C(UL) Specification: | CMG |
| EU CE Mark: | Yes |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2002/95/EC (RoHS): | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2004 |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |
| RG Type: | 59/U |

Flame Test

| | |
|----------------|-----------------------|
| UL Flame Test: | UL1666 Vertical Shaft |
|----------------|-----------------------|

Suitability

| | |
|------------------------|-----|
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | Yes |

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

| |
|-----------------|
| Impedance (Ohm) |
| 75 |

Nom. Inductance:

| |
|--------------------|
| Inductance (µH/ft) |
| 0.107 |

Nom. Capacitance Conductor to Shield:

| |
|---------------------|
| Capacitance (pF/ft) |
| 16.2 |

Nominal Velocity of Propagation:

| |
|--------|
| VP (%) |
| 83 |

Nominal Delay:

| |
|---------------|
| Delay (ns/ft) |
| 1.22 |

Nom. Conductor DC Resistance:

| |
|--------------------------|
| DCR @ 20°C (Ohm/1000 ft) |
| 10.0 |

Nom. Inner Shield DC Resistance:

| |
|--------------------------|
| DCR @ 20°C (Ohm/1000 ft) |
| 3.8 |

Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| 1 | 0.3 |
| 3.6 | 0.6 |
| 10 | 0.9 |

| | |
|------|------|
| 71.5 | 2.1 |
| 135 | 2.7 |
| 270 | 3.8 |
| 360 | 4.4 |
| 540 | 5.5 |
| 720 | 6.4 |
| 750 | 6.5 |
| 1000 | 7.6 |
| 1500 | 9.4 |
| 2500 | 12.4 |
| 3000 | 13.8 |

Max. Operating Voltage - UL:

| |
|----------------|
| Voltage |
| 300 V RMS |

Other Electrical Characteristic 1: Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge and termination.

Other Electrical Characteristic 2: Return Loss Tested in Accordance With ASTM D-4566 Paragraph 45.3, Using a 75 Ohm Fixed Bridge and Termination.

Minimum Return Loss:

| Start Freq. (MHz) | Stop Freq. (MHz) | Min. RL (dB) |
|-------------------|------------------|--------------|
| 5 | 560 | 23 |
| 560 | 645 | 15 |
| 645 | 850 | 23 |
| 851 | 3000 | 15 |

Sweep Test

Sweep Testing: Sweep tested 5 MHz to 3 GHz.

Related Documents:

No related documents are available for this product

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|--------------|-------|-------------------------------|
| 7796A B591000 | 1,000 FT | 299.000 LB | BLACK, MATTE | C | 5 #20 PE/GIFHDPE SH FRPVC PVC |
| 7796A B59500 | 500 FT | 153.000 LB | BLACK, MATTE | C | 5 #20 PE/GIFHDPE SH FRPVC PVC |

Notes:
C = CRATE REEL PUT-UP.

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