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please call

1-800-Belden1



## General Description:

RG-8 type, 10 AWG solid .108" bare copper-covered aluminum conductor, gas-injected foam HDPE insulation, Duobond® II + tinned copper braid shield (95% coverage), PVC jacket.

## Physical Characteristics (Overall)

### Conductor

AWG:

| # Coax | AWG | Stranding | Conductor Material                  | Dia. (in.) |
|--------|-----|-----------|-------------------------------------|------------|
| 1      | 10  | Solid     | BCCA - Bare Copper Covered Aluminum | .108       |

Total Number of Conductors: 1

### Insulation

Insulation Material:

| Insulation Material                                 | Dia. (in.) |
|---|------------|
| Gas-injected FHDPE - Foam High Density Polyethylene | .285       |

### Outer Shield

Outer Shield Material:

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

### Outer Jacket

Outer Jacket Material:

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

### Overall Cable

Overall Nominal Diameter: 0.403 in.

## Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +75°C

UL Temperature Rating: 60°C

Bulk Cable Weight: 86 lbs/1000 ft.

Max. Recommended Pulling Tension: 150 lbs.

Min. Bend Radius/Minor Axis: 4 in.

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

EU Directive 2011/65/EU (ROHS II): Yes

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: 8/U

Series Type: RF 400

**Flame Test**

|                 |                       |
|-----------------|-----------------------|
| UL Flame Test:  | UL1666 Vertical Shaft |
| CSA Flame Test: | FT4                   |

**Suitability**

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

**Plenum/Non-Plenum**

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

**Electrical Characteristics (Overall)**

**Nom. Characteristic Impedance:**

|                        |
|------------------------|
| <b>Impedance (Ohm)</b> |
| 50                     |

**Nom. Inductance:**

|                           |
|---------------------------|
| <b>Inductance (µH/ft)</b> |
| 0.060                     |

**Nom. Capacitance Conductor to Shield:**

|                            |
|----------------------------|
| <b>Capacitance (pF/ft)</b> |
| 23.0                       |

**Nominal Velocity of Propagation:**

|               |
|---------------|
| <b>VP (%)</b> |
| 86            |

**Nominal Delay:**

|                      |
|----------------------|
| <b>Delay (ns/ft)</b> |
| 1.17                 |

**Nom. Conductor DC Resistance:**

|                                 |
|---------------------------------|
| <b>DCR @ 20°C (Ohm/1000 ft)</b> |
| 1.34                            |

**Nominal Outer Shield DC Resistance:**

|                                 |
|---------------------------------|
| <b>DCR @ 20°C (Ohm/1000 ft)</b> |
| 2                               |

**Maximum VSWR:**

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Max. VSWR |
|-------------|-------------|-------------------|------------------|-----------|
|             |             | 5                 | 6000             | 1.25:1    |

**Nom. Attenuation:**

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| 30          | 0.7                      |
| 50          | 0.9                      |
| 150         | 1.5                      |
| 220         | 1.8                      |
| 450         | 2.7                      |
| 900         | 3.8                      |
| 1500        | 5.1                      |
| 1800        | 5.6                      |
| 2000        | 6.0                      |
| 2500        | 6.7                      |
| 3000        | 7.5                      |
| 3500        | 8.2                      |
| 4500        | 9.5                      |
| 5800        | 11.1                     |
| 6000        | 11.4                     |

**Max. Attenuation:**

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| 30          | 0.70                     |
| 50          | 0.93                     |
| 150         | 1.58                     |
| 220         | 1.94                     |
| 450         | 2.83                     |
| 900         | 4.06                     |
| 1500        | 5.32                     |
| 1800        | 5.98                     |
| 2000        | 6.35                     |
| 2500        | 7.08                     |

|      |       |
|------|-------|
| 3000 | 7.97  |
| 3500 | 8.80  |
| 4500 | 10.23 |
| 5800 | 12.00 |
| 6000 | 12.23 |

**Max. Power Rating:**

| Freq. (MHz) | Rating (W) |
|-------------|------------|
| 30          | 3427       |
| 50          | 2588       |
| 150         | 1428       |
| 220         | 1195       |
| 450         | 817        |
| 900         | 575        |
| 1500        | 437        |
| 1800        | 399        |
| 2000        | 375        |
| 2500        | 334        |
| 3000        | 305        |
| 3500        | 282        |
| 4500        | 247        |
| 5800        | 217        |
| 6000        | 213        |

**Max. Operating Voltage - Non-UL:**

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

**Sweep Test**

**Sweep Testing:** 100% Sweep tested to 6 GHz.

**Misc. Information (Overall)**

**Notes (Overall)**

**Notes:** 100% Sweep tested. 6 GHz. Belden® The Wire in Wireless®

**Put Ups and Colors:**

| Item #        | Putup    | Ship Weight | Color | Notes | Item Desc               |
|---------------|----------|-------------|-------|-------|-------------------------|
| 7810R 0101000 | 1,000 FT | 95.000 LB   | BLACK | C     | #10 LDPE/FHDPE SH FRPVC |
| 7810R 010500  | 500 FT   | 47.000 LB   | BLACK | C     | #10 LDPE/FHDPE SH FRPVC |

**Notes:**  
C = CRATE REEL PUT-UP.

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- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
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- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
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- Входной контроль качества.
- Наличие сертификата ISO.

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- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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