

## 7805 Coax - RG-174 Type

For more Information  
please call

1-800-Belden1

**Description:**

RG-174 type, 25 AWG solid .018" bare copper conductor, solid polyethylene insulation, Beldfoil® + tinned copper braid shield (90% coverage), PVC jacket.

**Physical Characteristics (Overall)****Conductor****AWG:**

| # Coax | AWG | Stranding | Conductor Material | Dia. (mm) |
|--------|-----|-----------|--------------------|-----------|
| 1      | 25  | Solid     | BC - Bare Copper   | 0.4572    |

**Insulation****Insulation Material:**

| Insulation Material | Dia. (mm) |
|---------------------|-----------|
| PE - Polyethylene   | 1.5494    |

**Outer Shield****Outer Shield Material:**

| Layer # | Outer Shield Trade Name | Type  | Outer Shield Material        | Coverage (%) |
|---------|-------------------------|-------|------------------------------|--------------|
| 1       | Beldfoil®               | Tape  | Aluminum Foil-Polyester Tape | 100          |
| 2       |                         | Braid | TC - Tinned Copper           | 90           |

**Outer Jacket****Outer Jacket Material:**

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

**Overall Cabling**

Overall Nominal Diameter: 2.794 mm

**Mechanical Characteristics (Overall)**

|                                        |                |
|----------------------------------------|----------------|
| Operating Temperature Range:           | -40°C To +75°C |
| Non-UL Temperature Rating:             | 80°C           |
| Bulk Cable Weight:                     | 13.394 Kg/Km   |
| Max. Recommended Pulling Tension:      | 71.171 N       |
| Min. Bend Radius (Install)/Minor Axis: | 6.350 mm       |

**Applicable Specifications and Agency Compliance (Overall)****Applicable Standards & Environmental Programs**

|                                       |            |
|---------------------------------------|------------|
| EU CE Mark:                           | No         |
| 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:                    | 174/U  |
| Series Type:                | RF 100 |

**Suitability**

|                        |                                     |
|------------------------|-------------------------------------|
| Suitability - Outdoor: | Yes                                 |
| Suitability - Aerial:  | Yes - When supported by a messenger |

**Plenum/Non-Plenum**

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

**Electrical Characteristics (Overall)****Nom. Characteristic Impedance:**

| Impedance (Ohm) |
|-----------------|
| 50              |

**Nom. Inductance:**

| Inductance (μH/m) |
|-------------------|
| 0.252637          |

**Nom. Capacitance Conductor to Shield:**

| Capacitance (pF/m) |
|--------------------|
| 102.367            |

**Nominal Velocity of Propagation:**

| VP (%) |
|--------|
| 66     |

**Nominal Delay:**

| Delay (ns/m) |
|--------------|
| 5.05274      |

**Nom. Conductor DC Resistance:**

| DCR @ 20°C (Ohm/km) |
|---------------------|
| 104.992             |

**Nominal Outer Shield DC Resistance:**

| DCR @ 20°C (Ohm/km) |
|---------------------|
| 29.8571             |

**Maximum VSWR:**

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

**Nom. Attenuation:**

| Freq. (MHz) | Attenuation (dB/100m) |
|-------------|-----------------------|
| 30          | 12.4678               |
| 50          | 16.0769               |
| 150         | 28.2166               |
| 220         | 34.1224               |
| 450         | 49.8712               |
| 900         | 72.182                |
| 1500        | 94.1647               |
| 1800        | 104.008               |
| 2000        | 109.585               |
| 2500        | 124.022               |
| 3000        | 137.802               |
| 3500        | 148.957               |
| 4500        | 171.596               |
| 5800        | 199.813               |
| 6000        | 203.422               |

**Nom. Power Rating:**

| Start Freq. (MHz) | Rating (W) |
|-------------------|------------|
|-------------------|------------|

|      |     |
|------|-----|
| 30   | 216 |
| 50   | 154 |
| 150  | 74  |
| 220  | 57  |
| 450  | 34  |
| 900  | 21  |
| 1500 | 14  |
| 1800 | 13  |
| 2000 | 12  |
| 2500 | 10  |
| 3000 | 9   |
| 3500 | 8   |
| 4500 | 7   |
| 5800 | 5   |
| 6000 | 5   |

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

| Voltage    |
|------------|
| 1100 V RMS |

**Notes (Overall)**

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

**Related Documents:**

No related documents are available for this product

**Put Ups and Colors:**

| Item #       | Putup  | Ship Weight | Color | Notes | Item Desc                      |
|--------------|--------|-------------|-------|-------|--------------------------------|
| 7805 010100  | 30 MT  | 0.771 KG    | BLACK | E     | RF100 WIRELESS 50 OHM COAX PVC |
| 7805 0101000 | 305 MT | 4.536 KG    | BLACK |       | RF100 WIRELESS 50 OHM COAX PVC |
| 7805 010500  | 152 MT | 2.495 KG    | BLACK |       | RF100 WIRELESS 50 OHM COAX PVC |

**Notes:**

E = MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'

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