

## 7805 Coax - RG-174 Type

For more Information  
please call

1-800-Belden1

**General 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. (in.) |
|--------|-----|-----------|--------------------|------------|
| 1      | 25  | Solid     | BC - Bare Copper   | .018       |

Total Number of Conductors: 1

**Insulation**

Insulation Material:

| Insulation Material | Dia. (in.) |
|---------------------|------------|
| PE - Polyethylene   | .061       |

**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 Cable**

Overall Nominal Diameter: 0.110 in.

**Mechanical Characteristics (Overall)**

|                                   |                |
|-----------------------------------|----------------|
| Operating Temperature Range:      | -40°C To +80°C |
| Non-UL Temperature Rating:        | 80°C           |
| Bulk Cable Weight:                | 9 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 16 lbs.        |
| Min. Bend Radius/Minor Axis:      | 1.250 in.      |

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

|                                       |            |
|---------------------------------------|------------|
| EU Directive 2011/65/EU (ROHS II):    | Yes        |
| 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        |
| MIL Order #39 (China RoHS):           | Yes        |
| RG Type:                              | 174/U      |
| Series Type:                          | RF 100     |

**Suitability**

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

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

Nom. Inductance:

| Inductance (µH/ft) |
|--------------------|
| .077               |

Nom. Capacitance Conductor to Shield:

| Capacitance (pF/ft) |
|---------------------|
| 31.2                |

Nominal Velocity of Propagation:

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

Nominal Delay:

| Delay (ns/ft) |
|---------------|
| 1.54          |

Nom. Conductor DC Resistance:

| DCR @ 20°C (Ohm/1000 ft) |
|--------------------------|
| 32.0                     |

Nominal Outer Shield DC Resistance:

| DCR @ 20°C (Ohm/1000 ft) |
|--------------------------|
| 9.1                      |

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.) |
|-------------|--------------------------|
| 5.000       | 1.500                    |
| 10.000      | 2.200                    |
| 30.000      | 3.800                    |
| 50.000      | 4.900                    |
| 150.000     | 8.600                    |
| 220.000     | 10.400                   |
| 450.000     | 15.200                   |
| 900.000     | 22.000                   |
| 1500.000    | 28.700                   |
| 1800.000    | 31.700                   |
| 2000.000    | 33.400                   |
| 2500.000    | 37.800                   |
| 3000.000    | 42.000                   |
| 3500.000    | 45.400                   |
| 4500.000    | 52.300                   |
| 5800.000    | 60.900                   |
| 6000.000    | 62.000                   |

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®.

Put Ups and Colors:

| Item #       | Putup    | Ship Weight | Color | Notes | Item Desc                      |
|--------------|----------|-------------|-------|-------|--------------------------------|
| 7805 010100  | 100 FT   | 1.700 LB    | BLACK | E     | RF100 WIRELESS 50 OHM COAX PVC |
| 7805 0101000 | 1,000 FT | 10.000 LB   | BLACK |       | RF100 WIRELESS 50 OHM COAX PVC |
| 7805 010500  | 500 FT   | 5.500 LB    | 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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