

## 7805R Coax - RG-174 Type

For more Information  
please call

1-800-Belden1

**Description:**

RG-174 type, 24.5 AWG solid .020" bare copper conductor, foam HDPE insulation, Beldfoil® + tinned copper braid shield (93% coverage), PVC jacket.

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

| # Coax | AWG  | Stranding | Conductor Material | Dia. (mm) |
|--------|------|-----------|--------------------|-----------|
| 1      | 24.5 | Solid     | BC - Bare Copper   | 0.4953    |

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

| Insulation Material                    | Dia. (mm) |
|----------------------------------------|-----------|
| FHDPE - Foam High Density Polyethylene | 1.524     |

**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           | 93           |

**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 |
| UL Temperature Rating:                 | 80°C           |
| Bulk Cable Weight:                     | 14.882 Kg/Km   |
| Max. Recommended Pulling Tension:      | 88.964 N       |
| Min. Bend Radius (Install)/Minor Axis: | 6.350 mm       |

**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:                          | 174/U  |
| Series Type:                      | RF 100 |

**Flame Test**

|                 |              |
|-----------------|--------------|
| UL Flame Test:  | UL1666 Riser |
| CSA Flame Test: | FT4          |

**Suitability**

|                        |                                     |
|------------------------|-------------------------------------|
| Suitability - Indoor:  | Yes                                 |
| 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) |
| 0.223108          |

**Nom. Capacitance Conductor to Shield:**

|                    |
|--------------------|
| Capacitance (pF/m) |
| 85.9622            |

**Nominal Velocity of Propagation:**

|        |
|--------|
| VP (%) |
| 73.5   |

**Nominal Delay:**

|              |
|--------------|
| Delay (ns/m) |
| 4.52778      |

**Nom. Conductor DC Resistance:**

|                     |
|---------------------|
| DCR @ 20°C (Ohm/km) |
| 89.5713             |

**Nominal Outer Shield DC Resistance:**

|                     |
|---------------------|
| DCR @ 20°C (Ohm/km) |
| 30.5133             |

**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          | 11.4835               |
| 50          | 15.0926               |
| 150         | 26.248                |
| 220         | 31.4976               |
| 450         | 45.934                |
| 900         | 66.2762               |
| 1500        | 87.2746               |
| 1800        | 96.7895               |
| 2000        | 102.367               |

|      |         |
|------|---------|
| 2500 | 116.147 |
| 3000 | 129.271 |
| 3500 | 141.083 |
| 4500 | 164.05  |
| 5800 | 193.579 |
| 6000 | 198.829 |

**Nom. Power Rating:**

| 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 - UL:**

| Voltage   |
|-----------|
| 300 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                    |
|---------------|--------|-------------|-------|-------|------------------------------|
| 7805R 008100  | 30 MT  | 0.771 KG    | GRAY  | E     | RF100LL WIRELESS 50 OHM COAX |
| 7805R 0081000 | 305 MT | 4.536 KG    | GRAY  |       | RF100LL WIRELESS 50 OHM COAX |
| 7805R 008500  | 152 MT | 2.495 KG    | GRAY  |       | RF100LL WIRELESS 50 OHM COAX |

**Notes:**

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

Revision Number: 1    Revision Date: 09-30-2009

© 2011 Belden, Inc  
 All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

