### **Detailed Specifications & Technical Data**

METRIC MEASUREMENT VERSION



### 7805R Coax - RG-174 Type

For more Information please call

1-800-Belden1



### **General Description:**

RG-174 type, 24.5 AWG solid .020" bare copper conductor, foam HDPE insulation, Beldfoil® + tinned copper braid shield (90% coverage), PVC jacket.

### **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

# Coax AWG Strand		Stranding	<b>Conductor Material</b>	Dia. (mm)	
	1	24.5	Solid	BC - Bare Copper	0.4953

**Total Number of Conductors:** 

#### 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	100.000
2		Braid	TC - Tinned Copper	90.000

### **Outer Jacket**

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

# Outer Jacket Material PVC - Polyvinyl Chloride

### **Overall Cable**

Overall Nominal Diameter: 2.794 mm

### **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-40°C To +80°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	13.394 Kg/Km
Max. Recommended Pulling Tension:	88.964 N
Min. Bend Radius/Minor Axis:	31.750 mm

### **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	

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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 174/U				
RG Type:					
Series Type:	RF 100				
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:



Nom. Inductance:



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)
5.000	4.593
10.000	6.562
30.000	11.484
50.000	15.093
150.000	26.248
220.000	31.498
450.000	45.934
900.000	66.276
1500.000	87.275

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### **Detailed Specifications & Technical Data**

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1800.000	96.790
2000.000	102.367
2500.000	116.147
3000.000	129.271
3500.000	141.083
4500.000	164.050
5800.000	193.579
6000.000	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®

### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7805R 008100	100 FT	1.700 LB	GRAY	E	RF100LL WIRELESS 50 OHM COAX
7805R 0081000	1,000 FT	10.000 LB	GRAY		RF100LL WIRELESS 50 OHM COAX
7805R 008500	500 FT	5.500 LB	GRAY		RF100LL WIRELESS 50 OHM COAX

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

Revision Number: 3 Revision Date: 08-01-2013

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