

## 7810A Coax - RG-8 Type

 For more Information  
 please call

1-800-Belden1

**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), polyethylene jacket.

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

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

**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
PE - Polyethylene

**Overall Cable**

Overall Nominal Diameter: 0.403 in.

**Mechanical Characteristics (Overall)**

Operating Temperature Range:	-40°C To +75°C
Non-UL Temperature Rating:	80°C
Bulk Cable Weight:	77 lbs/1000 ft.
Max. Recommended Pulling Tension:	150 lbs.
Min. Bend Radius (Install)/Minor Axis:	4 in.

**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
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RG Type:	8/U
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Series Type:	RF 400
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**Suitability**

Suitability - Outdoor:	Yes
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Suitability - Aerial:	Yes - When supported by a messenger
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Suitability - Burial:	Yes
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**Plenum/Non-Plenum**

Plenum (Y/N):	No
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**Electrical Characteristics (Overall)****Nom. Characteristic Impedance:**

Impedance (Ohm)

50

**Nom. Inductance:**

Inductance (μH/ft)

0.060

**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/ft)

23.0

**Nominal Velocity of Propagation:**

VP (%)

86

**Nominal Delay:**

Delay (ns/ft)

1.17

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)

1.34

**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)

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: 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
7810A 0101000	1,000 EA	79.000 LB	BLACK	C	RF400 WIRELESS 50 OHM COAX PE
7810A 010500	500 FT	39.000 LB	BLACK	C	RF400 WIRELESS 50 OHM COAX PE

**Notes:**

C = CRATE REEL PUT-UP.

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