ENGLISH MEASUREMENT VERSION



7810R Coax - RG-8 Type

For more Information please call

1-800-Belden1



General 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), PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

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

Total Number of Conductors:

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 Typ		Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Таре	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

Outer Jacket

Outer Jacket Material:

Outer Jacket Material PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 0.403 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +75°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	86 lbs/1000 ft.
Max. Recommended Pulling Tension:	150 lbs.
Min. Bend Radius/Minor Axis:	4 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

CEC/C(UL) Specification: CMG EU Directive 2011/65/EU (ROHS II): Yes	
FIL Directive 2011/65/FIL (ROHS II): Yes	
Ed Briedrive 2011/03/Ed (Norto II).	
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
RG Type:	8/U
Series Type:	RF 400
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:



Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:



Nominal Outer Shield DC Resistance:

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DCR @ 20°C (Ohm/1000 ft)
2
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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

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

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7810R 0101000	1,000 FT	95.000 LB	BLACK	С	#10 LDPE/FHDPE SH FRPVC
7810R 010500	500 FT	47.000 LB	BLACK	С	#10 LDPE/FHDPE SH FRPVC

Notes:

C = CRATE REEL PUT-UP.

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Revision Number: 5 Revision Date: 10-03-2012

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

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