METRIC 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		Stranding	Conductor Material	Dia. (mm)
1	10	Solid	BCCA - Bare Copper Covered Aluminum	2.7432

Total Number of Conductors:

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	7.239

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 PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 10.236 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +75°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	127.985 Kg/Km
Max. Recommended Pulling Tension:	667.230 N
Min. Bend Radius/Minor Axis:	101.600 mm

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)

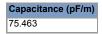
Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Shield:



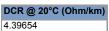
Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:



Nominal Outer Shield DC Resistance:

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DCR @ 20°C (Ohm/km)
6.562
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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/100m)
30	2.2967
50	2.9529
150	4.9215
220	5.9058
450	8.8587
900	12.4678
1500	16.7331
1800	18.3736
2000	19.686

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2500	21.9827
3000	24.6075
3500	26.9042
4500	31.1695
5800	36.4191
6000	37.4034

Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
30	2.2967
50	3.05133
150	5.18398
220	6.36514
450	9.28523
900	13.3209
1500	17.4549
1800	19.6204
2000	20.8344
2500	23.2295
3000	26.1496
3500	28.8728
4500	33.5646
5800	39.372
6000	40.1266

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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7810R Coax - RG-8 Type

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

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