METRIC MEASUREMENT VERSION



7810R 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), PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

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

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 Cabling

Overall Nominal Diameter: 10.236 mm

Mechanical Characteristics (Overall)					
Operating Temperature Range:	-40°C To +75°C				
UL Temperature Rating:	80°C				
Bulk Cable Weight:	128.878 Kg/Km				
Max. Recommended Pulling Tension:	667.230 N				
Min. Bend Radius (Install)/Minor Axis:	101.600 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

Page 1 of 4 05-10-2011

METRIC MEASUREMENT VERSION



7810R Coax - RG-8 Type

EU Directive 2003/11/EC (BFR):	Yes				
CA Prop 65 (CJ for Wire & Cable):	Yes				
MII Order #39 (China RoHS):	Yes 8/U				
RG Type:					
Series Type:	RF 400				
Flame Test					
UL Flame Test:	UL1666 Vertical Shaft				
C(UL) Flame Test:	FT4				
Suitability					
Suitability - Indoor:	Yes				
Suitability - Aerial:	Yes - When supported by a messenger				
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:

Delay (ns/m) 3.83877

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 4.39654

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 6.562

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
2500	21.9827
3000	24.6075

Page 2 of 4 05-10-2011

METRIC MEASUREMENT VERSION



7810R Coax - RG-8 Type

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® $\,$

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7810R 0101000	305 MT	43.091 KG	BLACK	С	#10 LDPE/FHDPE SH FRPVC
7810R 010500	152 MT	21.319 KG	BLACK	С	#10 LDPE/FHDPE SH FRPVC

Notes:

Page 3 of 4 05-10-2011

METRIC MEASUREMENT VERSION



7810R Coax - RG-8 Type

C = CRATE REEL PUT-UP.

Revision Number: 4 Revision Date: 09-30-2009

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Page 4 of 4