Detailed Specifications & Technical Data





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. (mm)		
1 10 Solid BCCA - Bare Copper Covered	Aluminum 2.7432		
Insulation			
Insulation Material:			
	Dia. (mm) 7.239		
Outer Shield Outer Shield Material:			
Layer # Outer Shield Trade Name Type Outer Shield	Material	overage (%)	
	num Foil-Polyester Tape-Aluminum Foil 10		
2 Braid TC - Tinned C	opper 95	5	
Overall Cable Overall Nominal Diameter:	10.236 mm		
	10.200 mm		
Mechanical Characteristics (Overall)			
Operating Temperature Range:	-40°C To +75°C		
Non-UL Temperature Rating:	80°C		
Bulk Cable Weight:	114.591 Kg/Km		
Max. Recommended Pulling Tension:	667.230 N		
Min. Bend Radius (Install)/Minor Axis:	101.600 mm		
Applicable Specifications and Agency Con	npliance (Overall)		
Applicable Standards & Environmental Progra	ms		
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		

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		7810A Coax - RG-8 1
MII Order #39 (China RoHS):	Yes	
RG Type:	8/U	
Series Type:	RF 400	
Suitability		
Suitability - Outdoor:	Yes	
Suitability - Aerial:	Yes - When supported by a messenger	
Suitability - Burial:	Yes	
Plenum/Non-Plenum		
Plenum (Y/N):	No	
lectrical Characteristics (Overall)		
Nom. Characteristic Impedance:		
Impedance (Ohm)		
50		
Nom. Inductance:		
Inductance (µH/m)		
0.19686		
Nom. Capacitance Conductor to Shield:		
Nom. Capacitance Conductor to Shield: Capacitance (pF/m)		
Capacitance (pF/m) 75.463		
Capacitance (pF/m) 75.463 Nominal Velocity of Propagation:		
Capacitance (pF/m) 75.463		
Capacitance (pF/m) 75.463 Nominal Velocity of Propagation: VP (%) 86		
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Capacitance (pF/m) 75.463 Nominal Velocity of Propagation: VP (%) 86 Nominal Delay: Delay (ns/m) 3.83877		
Capacitance (pF/m) 75.463 Nominal Velocity of Propagation: VP (%) 86 Nominal Delay: Delay (ns/m) 3.83877 Nom. Conductor DC Resistance:		
Capacitance (pF/m) 75.463 Nominal Velocity of Propagation: VP (%) 86 Nominal Delay: Delay (ns/m)		
Capacitance (pF/m) 75.463 Nominal Velocity of Propagation: VP (%) 86 Nominal Delay: Delay (ns/m) 3.83877 Nom. Conductor DC Resistance: DCR @ 20°C (Ohm/km)		
Capacitance (pF/m) 75.463 Nominal Velocity of Propagation: VP (%) 86 Nominal Delay: Delay (ns/m) 3.83877 Nom. Conductor DC Resistance: DCR @ 20°C (Ohm/km) 4.39654 Nominal Outer Shield DC Resistance:		
Capacitance (pF/m) 75.463 Nominal Velocity of Propagation: VP (%) 86 Nominal Delay: Delay (ns/m) 3.83877 Nom. Conductor DC Resistance: DCR @ 20°C (Ohm/km) 4.39654		
Capacitance (pF/m) 75.463 Nominal Velocity of Propagation: VP (%) 86 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)		
Capacitance (pF/m) 75.463 Nominal Velocity of Propagation: VP (%) 86 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	req. (MHz) Max. VSWR	

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
3500	26.9042
4500	31.1695
5800	36.4191
6000	37.4034

Max. Attenuation:

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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: 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	117.565 KG	BLACK	С	RF400 WIRELESS 50 OHM COAX PE
7810A 010500	152 MT	17.690 KG	BLACK	С	RF400 WIRELESS 50 OHM COAX PE

Notes:

C = CRATE REEL PUT-UP.

METRIC MEASUREMENT VERSION



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