## **Detailed Specifications & Technical Data**





## 7810A 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), polyethylene jacket.

Physical	Characteristic			(			
Conducto							
AWG:							
# Coa	ax AWG Stranding 10 Solid		erial I opper Covered Aluminum 1.	Dia. (in.)			
	Number of Conduc	tors:		1			
Insulation Insulatio	n on Material:						
Insula	ation Material	Dia. (in.)					
Gas-i	injected FHDPE - Fo	am High Density	Polyethylene .285				
Outer Shi							
	hield Material:	- de Marca Trans	Outer Object Meterial		0		
Layer	Bonded Duofoil®		Outer Shield Material Bonded Aluminum Foil-Po	lvester Tape-Aluminum Fo	Coverage (%)		
2			TC - Tinned Copper		95		
						]	
Outer Jac Outer Ja	acket Material:						
Outer	r Jacket Material						
PE - F	Polyethylene						
Overall C	able						
Overa	all Nominal Diamete	er:		0.403 in.			
lechanio	cal Characteris	stics (Overal	D				
	ating Temperature F		,	-40°C To +75°C			
Non-U	JL Temperature Rat	ting:		80°C			
Bulk (	Cable Weight:			70 lbs/1000 ft.			
Max. F	Max. Recommended Pulling Tension:			150 lbs.			
Min. B	Bend Radius/Minor	Axis:		4 in.			
nnlicah	le Specificatio	ns and Ago	ncy Compliance (Ov	vorall)			
	le Standards & E	-		veranj			
	rective 2011/65/EU		-	Yes			
EU CE	E Mark:			No			
EU Di	rective 2000/53/EC	(ELV):		Yes			
EU Di	rective 2002/95/EC	(RoHS):		Yes			
EU Ro	oHS Compliance Da	ate (mm/dd/yyyy)	):	01/01/2004			
EU Di	rective 2002/96/EC	(WEEE):		Yes			
EU Di	rective 2003/11/EC	(BFR):		Yes			
CA Pr	op 65 (CJ for Wire	& Cable):		Yes			
MII Or	rder #39 (China Rol	HS):		Yes			
RG Ty	/pe:			8/U			
Series	s Туре:			RF 400			
0							

Suitability

Plenum/Non-Plenum

-- -----

...

# **Detailed Specifications & Technical Data**

## ENGLISH MEASUREMENT VERSION



## 7810A Coax - RG-8 Type

ectrical om. Chara 50 om. Inductar 0.060 om. Capacita 23.0 ominal Ve VP (%) 86 ominal De Delay (n 1.17	nce (µH/ft) citance Conductor to Shield ance (pF/ft) slocity of Propagation:
impedan 50 inductar 0.060 capacita 23.0 VP (%) 86 VP (%) 86 Delay (n 1.17	acteristic Impedance: nce (Ohm) .tance: nce (µH/ft) .citance Conductor to Shield ance (pF/ft) .locity of Propagation: slay:
impedan 50 inductar 0.060 capacita 23.0 VP (%) 86 VP (%) 86 Delay (n 1.17	acteristic Impedance: nce (Ohm) .tance: nce (µH/ft) .citance Conductor to Shield ance (pF/ft) .locity of Propagation: slay:
Impedan 50 om. Inductar 0.060 Capacita 23.0 ominal Ve VP (%) 86 VP (%) 86 Delay (n 1.17	nce (Ohm) tance: nce (µH/ft) citance Conductor to Shield ance (pF/ft) locity of Propagation: slay:
Inductar 0.060 Capacita 23.0 Cominal Ve VP (%) 86 Lominal De Delay (n 1.17	nce (µH/ft) citance Conductor to Shield ance (pF/ft) slocity of Propagation:
Inductar 0.060 om. Capacita 23.0 oominal Ve VP (%) 86 Delay (n 1.17	nce (µH/ft) citance Conductor to Shield ance (pF/ft) slocity of Propagation:
0.060 Iom. Capacita 23.0 Iominal Ve VP (%) 86 Iominal De Delay (n 1.17	citance Conductor to Shield ance (pF/ft) elocity of Propagation:
Iom. Capac Capacita 23.0 Iominal Ve VP (%) 86 Iominal De Delay (n 1.17	ance (pF/ft) locity of Propagation:
Capacita 23.0 Nominal Ve VP (%) 86 Nominal De Delay (n 1.17	ance (pF/ft) locity of Propagation:
Capacita 23.0 Nominal Ve VP (%) 86 Nominal De Delay (n 1.17	ance (pF/ft) locity of Propagation:
23.0 Nominal Ve VP (%) 86 Nominal De Delay (n 1.17	locity of Propagation:
VP (%) 86 Nominal De Delay (n 1.17	elay:
VP (%) 86 Nominal De Delay (n 1.17	elay:
86 Nominal De Delay (n 1.17	
<b>Delay (n</b> 1.17	
<b>Delay (n</b> 1.17	
1.17	
lom. Cond	
Conn. Conna	uctor DC Resistance:
DCR @ 2	20°C (Ohm/1000 ft)
1.34	
	uter Shield DC Resistance:
	20°C (Ohm/1000 ft)
2	
	(0).VD
Aaximum V	
Descript	tion Freq. (MHz) Start Freq.
	5
Nom. Atten	
	Hz) Attenuation (dB/100 ft.)
30	0.7
50	0.9
150	1.5
220	1.8
450	2.7
900 1500	3.8 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
lax. Attenu	Hz) Attenuation (dB/100 ft.)
	HZ) Attenuation (db/100 ft.)
Freq. (M	0.70
<b>Freq. (M</b> 30	0.70
<b>Freq. (M</b> 30 50	0.93
Freq. (M 30 50 150	0.93
Freq. (M 30 50 150 220	0.93 1.58 1.94
Freq. (M 30 50 150 220 450	0.93 1.58 1.94 2.83
Freq. (M   30   50   150   220   450   900	0.93 1.58 1.94 2.83 4.06
Freq. (M   30   50   150   220   450   900   1500	0.93 1.58 1.94 2.83 4.06 5.32
Freq. (M 30 50 150 220 450 900 1500 1800	0.93 1.58 1.94 2.83 4.06 5.32 5.98
Freq. (M 30 50 150 220 450 900 1500 1800 2000	0.93 1.58 1.94 2.83 4.06 5.32 5.98 6.35
Freq. (M   30   50   150   220   450   900   1500   1800   2000   2500	0.93   1.58   1.94   2.83   4.06   5.32   5.98   6.35   7.08
Freq. (M 30 50 150 220 450 900 1500 1800 2000	0.93 1.58 1.94 2.83 4.06 5.32 5.98 6.35
Freq. (M   30   50   150   220   450   900   1500   1800   2000   2500   3000	0.93 1.58 1.94 2.83 4.06 5.32 5.98 6.35 7.08 7.97 8.80
Freq. (M   30   50   150   220   450   900   1500   2000   2500   3000   3500	0.93 1.58 1.94 2.83 4.06 5.32 5.98 6.35 7.08 7.97
Freq. (M   30   50   150   220   450   900   1500   2000   2500   3000   3500   4500   5800	0.93   1.58   1.94   2.83   4.06   5.32   5.98   6.35   7.08   7.97   8.80   10.23   12.00
Freq. (M   30   50   150   220   450   900   1500   1800   2000   2500   3000   3500   4500   5800   6000	0.93   1.58   1.94   2.83   4.06   5.32   5.98   6.35   7.08   7.97   8.80   10.23   12.00   12.23
Freq. (M   30   50   150   220   450   900   1500   2000   2500   3000   3500   4500   5800   6000	0.93 1.58 1.94 2.83 4.06 5.32 5.98 6.35 7.08 7.97 8.80 10.23 12.00 12.23 r Rating:
Freq. (M   30   50   150   220   450   900   1500   2000   2500   3000   3500   4500   5800   6000	0.93   1.58   1.94   2.83   4.06   5.32   5.98   6.35   7.08   7.97   8.80   10.23   12.00   12.23

## **Detailed Specifications & Technical Data**





### 7810A Coax - RG-8 Type

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®

#### Put Ups and Colors:

ltem #	Putup	Ship Weight	Color	Notes	Item Desc
7810A 0101000	1,000 EA	79.000 LB	BLACK	С	RF400 WIRELESS 50 OHM COAX PO
7810A 010500	500 FT	39.000 LB	BLACK	С	RF400 WIRELESS 50 OHM COAX PO

Notes:

C = CRATE REEL PUT-UP.

#### Revision Number: 4 Revision Date: 07-19-2013

© 2017 Belden, Inc All Rights Reserved.

All Rights Reserved. Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability. Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein. All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information and belief at the date of its publication. The information provided in this Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in the ore that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.