Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



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 Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	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 #	er # Outer Shield Trade Name 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 PE - Polyethylene

Overall Cable

Overall Nominal Diameter: 10.236 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +75°C
Non-UL Temperature Rating:	80°C
Bulk Cable Weight:	104.174 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

EU Directive 2011/65/EU (ROHS II):	Yes
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
MII Order #39 (China RoHS):	Yes
RG Type:	8/U
Series Type:	RF 400

Suitability

Plenum/Non-Plenum

Page 1 of 3 11-05-2015

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



7810A Coax - RG-8 Type

Plenum (Y/N): No **Electrical Characteristics (Overall)** Nom. Characteristic Impedance: Impedance (Ohm) Nom. Inductance: Inductance (µH/m) 0.19686 Nom. Capacitance Conductor to Shield: Capacitance (pF/m) 75.463 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 6000 1.25:1 Nom. Attenuation: Freq. (MHz) Attenuation (dB/100m) 50 2.9529 150 4.9215 220 5.9058 450 8.8587 900 12.4678 1500 16.7331 18.3736 1800 2000 19.686 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

Max. Power Rating:

2000

2500

3000

3500

4500

5800

6000

Fre	q. (MHz)	Rating	(W)
30		3427	

20.8344

23.2295

26.1496

28.8728

33.5646

39.372

40.1266

Page 2 of 3 11-05-2015

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



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:



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:

Item #	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

© 2015 Belden, Inc 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 provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one 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.

Page 3 of 3 11-05-2015