



Product: [7810A](#)

50 Ohm Wireless Transmission Coax, RF 400, RG8, 10 AWG Solid BCCA, Foil + 95% TC Braid, PE Jkt

Product Description

50 Ohm Wireless Transmission Coax, RF 400, RG8, 10 AWG Solid Bare Copper Covered Aluminum Conductor, PE Insulation, Duofoil® II + 95% Tinned Copper Braid Shield, PE Jacket

Technical Specifications

Product Overview

Suitable Applications:	Point-to-point and point-to-multipoint wireless antenna communication; Wireless microphones, Two-Way Radios, Amateur (Ham) Radio, Low Power FM, GPS, RFID (Radio Frequency Identification)
------------------------	--

Construction Details

RG Type:	8
----------	---

Conductor

AWG	Stranding	Nom. Diameter	Material
10	Solid	0.108 in	BCCA - Bare Copper Covered Aluminum

Insulation

Material	Nom. Diameter
PE - Polyethylene (Foam)	0.285 in

Outer Shield Material

Layer	Outer Shield Type	Material	Material Trade Name	Coverage
1	Tape	Tri-Laminate (Alum+Poly+Alum)	Duobond® II	100%
2	Braid	Tinned Copper (TC)		95%

Outer Jacket Material

Material	Nom. Diameter
PE - Polyethylene	0.403 in

Electrical Characteristics

VSWR

Frequency [MHz]	Max. VSWR
5 - 6000 MHz	1.25:1

Attenuation

Frequency	Nom. Attenuation [dB/100ft]
30 MHz	0.7 dB/100ft
50 MHz	0.9 dB/100ft
150 MHz	1.5 dB/100ft
220 MHz	1.8 dB/100ft
450 MHz	2.7 dB/100ft
900 MHz	3.8 dB/100ft
1500 MHz	5.1 dB/100ft
1800 MHz	5.6 dB/100ft
2000 MHz	6 dB/100ft

2500 MHz	6.7 dB/100ft
3000 MHz	7.5 dB/100ft
3500 MHz	8.2 dB/100ft
4500 MHz	9.5 dB/100ft
5800 MHz	11.1 dB/100ft
6000 MHz	11.4 dB/100ft

Power Rating

Frequency [MHz]	Max. Power Rating [W]
30 MHz	3,427 W
50 MHz	2,588 W
150 MHz	1,428 W
220 MHz	1,195 W
450 MHz	817 W
900 MHz	575 W
1,500 MHz	437 W
2,000 MHz	375 W
2,500 MHz	334 W
3,500 MHz	282 W
4,500 MHz	247 W
6,000 MHz	213 W

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Impedence	Nom. Velocity
1.3 Ohm/1000ft	2.0 Ohm/1000ft	23 pF/ft	50 Ohm	86%

Voltage

Non-UL Voltage Rating
300 V

Mechanical Characteristics

Temperature

Operating
-30°C to +75°C

Bulk Cable Weight:	70 lbs/1000ft
Max. Pull Tension:	150 lbs

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor
Sustainability:	CA Prop 65
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.349 Revision Date: 09-30-2020
----------------------	--

© 2020 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 here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information 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. The 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Belden Wire & Cable:](#)

[7810A 010500](#) [7810A 0101000](#)