



**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)
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#### Construction Details

RG Type:	8
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#### 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. Impedance	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
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