


**Product:** [7808WB](#) 



50 Ohm Wireless Transmission Coax, RF 240, RG58X, 15 AWG Solid BC, Foil + 95% TC Braid, PE Jkt, Waterblocked

### Product Description

50 Ohm Wireless Transmission Coax, RF 240, RG58X, 15 AWG Solid Bare Copper Conductor, PE Insulation, Duofoil® II + 95% Tinned Copper Braid Shield, Flooded, PE Jacket, Waterblocked

### 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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#### Physical Characteristics (Overall)

##### Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
15	Solid	BC - Bare Copper	0.057 in	1

Conductor Count: 1

##### Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.150 in

##### Outer Shield

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	2	Tinned Copper (TC)		95%

##### Outer Jacket

Material	Nominal Diameter
PE - Polyethylene	0.240 in

#### Electrical Characteristics

##### Conductor DCR

Nominal Conductor DCR	Nominal Conductor DCR	Conductor Resistance	Nominal Outer Shield DCR	Outer Conductor DCR
3.2 Ohm/1000ft	3.2 Ohm/1000ft		2.8 Ohm/1000ft	2.8 Ohm/1000ft

##### Capacitance

Nom. Capacitance Conductor to Shield
23 pF/ft

##### Inductance

Nominal Inductance
0.06 µH/ft

##### Impedance

Nominal Characteristic Impedance
50 Ohm

**High Frequency (Nominal/Typical)**

Frequency [MHz]	Nom. Insertion Loss
5 MHz	0.58 dB/100ft
10 MHz	0.77 dB/100ft
30 MHz	1.3 dB/100ft
50 MHz	1.6 dB/100ft
150 MHz	2.8 dB/100ft
220 MHz	3.4 dB/100ft
450 MHz	4.9 dB/100ft
900 MHz	7.0 dB/100ft
1500 MHz	9.1 dB/100ft
1800 MHz	10.1 dB/100ft
2000 MHz	10.7 dB/100ft
2500 MHz	12 dB/100ft
3000 MHz	13.4 dB/100ft
3500 MHz	14.6 dB/100ft
4500 MHz	16.7 dB/100ft
5800 MHz	19.5 dB/100ft
6000 MHz	19.8 dB/100ft

**Delay**

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.18 ns/ft	86%

**High Frequency**

Frequency [MHz]
30 MHz
50 MHz
150 MHz
220 MHz
450 MHz
900 MHz
1500 MHz
1800 MHz
2000 MHz
2500 MHz
3000 MHz
3500 MHz
4500 MHz
5800 MHz
6000 MHz

**Power Rating**

Frequency [MHz]	Max. Power Rating [W]
30 MHz	1,526 W
50 MHz	1,186 W
150 MHz	673 W
220 MHz	556 W
450 MHz	382 W
900 MHz	268 W
1,500 MHz	205 W
2,000 MHz	177 W
2,500 MHz	156 W
3,500 MHz	100 W
4,500 MHz	116 W
6,000 MHz	100 W

**Voltage**

Non-UL Voltage Rating
300 V RMS

**VSWR**

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

## Temperature Range

Operating Temp Range:	-30°C to +75°C
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## Mechanical Characteristics

UV Resistance:	Yes - Black only
Bulk Cable Weight:	35 lbs/1000ft
Max. Pull Tension:	69 lbs
Min. Bend Radius/Minor Axis:	2.4 in

## Standards

RG Type:	58X
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## Applicable Environmental and Other Programs

Environmental Space:	Outdoor - Water Exposure
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
MII Order #39 (China RoHS):	Yes

## Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	Yes
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

## Plenum/Non-Plenum

Plenum (Y/N):	No
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## Part Number

### Variants

Item #	Color	Put-Up Type	Length	UPC
7808WB 010500	Black	Reel	500 ft	612825189725
7808WB 0101000	Black	Reel	1,000 ft	612825189718

Footnote:	C - CRATE REEL PUT-UP.
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## History

Update and Revision:	Revision Number: 0.360 Revision Date: 09-10-2021
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