

Product: <u>7808WB</u> ☑



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
Condu	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

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

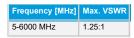
Frequency [MHz]
30 MHz
50 MHz
150 MHz
220 MHz
450 MHz
900 MHz
1500 MHz
1800 MHz
2000 MHz
2500 MHz
3000 MHz
3500 MHz
4500 MHz
5800 MHz
6000 MHz

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



Temperature Range

Operating Temp Range:	-30°C to +75°C

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	

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

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 - CF	RATE REEL PUT-

History

Update and Revision:	Revision Number: 0.361 Revision Date: 12-15-2021

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