

Product: [7808WB](#) 

Wireless Coax, RG8X Type, #15, Waterblocked



Product Description

RG-8X type, 15 AWG solid .057" bare copper conductor, gas-injected foam HDPE insulation, Duobond® II, tinned copper braid shield (95% coverage), flooded water-resistant polyethylene jacket.

Technical Specifications

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)		0.15 in		
Insulation, Table Note:				Gas Injected
Outer Shield Material				
Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Alum / Poly / Alum	Bonded Duofoil®	100 %
Braid	2	TC - Tinned Copper		95 %
Outer Shield Table Note:				Tape is bonded to dielectric, PO - Polyolefin
Outer Jacket Material				
Material		Nominal Diameter		
PE - Polyethylene		0.24 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 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 Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)
30 MHz	1.37 dB/100ft
50 MHz	1.8 dB/100ft
150 MHz	3.1 dB/100ft
220 MHz	3.7 dB/100ft
450 MHz	5.4 dB/100ft
900 MHz	7.8 dB/100ft
1500 MHz	10.2 dB/100ft
1800 MHz	11.2 dB/100ft
2000 MHz	11.9 dB/100ft
2500 MHz	13.4 dB/100ft
3000 MHz	14.7 dB/100ft
3500 MHz	15.9 dB/100ft
4500 MHz	18.2 dB/100ft
5800 MHz	20.8 dB/100ft
6000 MHz	21.2 dB/100ft

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	286 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
4,500 MHz	116 W
5,800 MHz	102 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:	-20°C To +75°C
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Mechanical Characteristics

Bulk Cable Weight:	35 lbs/1000ft
Max Recommended Pulling Tension:	69 lbs
Min Bend Radius/Minor Axis:	2.4 in

Standards

RG Type:	58/X Type
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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 II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	Yes - When supported by messenger wire
Suitability - Burial:	Yes
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Putup 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: 0.272 Revision Date: 04-28-2020
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