# **Detailed Specifications & Technical Data**

Chalast



METRIC MEASUREMENT VERSION

## 7809WB Coax - Intermediate Type

For more Information please call

1-800-Belden1



## **General Description:**

Intermediate type, 13 AWG solid .072" bare copper conductor, gas-injected foam HDPE insulation, Duobond® II + tinned copper braid shield (95% coverage), flooded water-resistant polyethylene jacket.

Physical Characteristics (Overall)	
Conductor	
AWG:	
# Coax AWG Stranding Conductor Material Dia. (mm)	
1 13 Solid BC - Bare Copper 1.8288	
Total Number of Conductors:	1
Insulation Insulation Material:	
Insulation Material Di	ia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene 4.	826
Outer Shield Outer Shield Material:	
Layer # Outer Shield Trade Name Type Outer Shield M	laterial Coverage (%)
1 Bonded Duofoil® Tape Bonded Alumin	um Foil-Polyester Tape-Aluminum Foil 100
2 Braid TC - Tinned Co	pper 95
Outer Shield Flooding Grease:	PO - Polyolefin
Outer Jacket Outer Jacket Material: Outer Jacket Material PE - Polyethylene Overall Cable	
Overall Nominal Diameter:	7.620 mm
Mechanical Characteristics (Overall)	
Operating Temperature Range:	-40°C To +75°C
Non-UL Temperature Rating:	80°C
Bulk Cable Weight:	68.457 Kg/Km
Max. Recommended Pulling Tension:	600.507 N
Min. Bend Radius/Minor Axis:	76.200 mm
Applicable Specifications and Agency Com	pliance (Overall)
Applicable Standards & Environmental Program	
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	No
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004

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EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Series Type:	RF 300
Suitability	
Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - When supported by a messenger
Suitability - Burial:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No

## Nom. Characteristic Impedance:

Impedance (Ohm)

50

Nom. Inductance:

Inductance (µH/m)

0.19686

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

75.463

Nominal Velocity of Propagation:

**VP (%)** 86

Nominal Delay:

Delay (ns/m) 3.83877

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

6.8901

Nominal Outer Shield DC Resistance:

## DCR @ 20°C (Ohm/km)

7.8744

Maximum VSWR:

#### Description Freq. (MHz) Start Freq. (MHz) Stop Freq. (MHz) Max. VSWR

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		5	6000	1.25:1

#### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
5.000	1.476
10.000	1.969
30.000	3.281
50.000	4.265
150.000	7.218
220.000	8.859
450.000	12.796
900.000	18.374
1500.000	23.951
1800.000	26.576
2000.000	28.217
2500.000	31.826
3000.000	35.435

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3500.000	38.716
4500.000	44.294
5800.000	51.840
6000.000	52.496

#### Nom. Power Rating:

Freq. (MHz)	Rating (W)
30	2161
50	1658
150	928
220	758
450	522
900	367
1500	278
1800	253
2000	239
2500	212
3000	194
3500	179
4500	157
5800	137
6000	135

#### Max. Power Rating:

Freq. (MHz)	Rating (W)
30.000	2161.000
50.000	1658.000
150.000	928.000
220.000	758.000
450.000	522.000
900.000	367.000
1500.000	278.000
1800.000	253.000
2000.000	239.000
2500.000	212.000
3000.000	194.000
3500.000	179.000
4500.000	157.000
5800.000	137.000
6000.000	135.000

#### Max. Operating Voltage - Non-UL:

#### Voltage

300 V RMS

#### **Sweep Test**

Sweep Testing:

100% Sweep tested to 6 GHz.

## **Misc. Information (Overall)**

## Notes (Overall)

Notes: 100% Sweep tested. 6 GHz. Belden  $\ensuremath{\mathbb{R}}$  The Wire in Wireless  $\ensuremath{\mathbb{R}}$ 

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7809WB 0101000	1,000 FT	59.000 LB	BLACK	С	RF300 WIRELESS 50 OHM COAX WB
7809WB 010500	500 FT	30.500 LB	BLACK	С	RF300 WIRELESS 50 OHM COAX WB

Notes:

C = CRATE REEL PUT-UP.





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**Revision Number: 5** Revision Date: 01-06-2014

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