



7809WB

Part Number: 7809WB

Intermediate Type

Product Description

Intermediate type, 13 AWG solid .072" bare copper conductor, gas-injected foam HDPE insulation, Duobond® II & #43; tinned copper braid shield (95% coverage), flooded water-resistant polyethylene jacket.

Product Specifications

Conductor

Total Number of Conductors:

1

Technical Specifications

APAC Standard

Mil Order #39 (China RoHS):

Yes

Bend Radius

Min Bend Radius/Minor Axis:

3 in

CCB-Part Number

Notes:

100% Sweep tested. 6 GHz. Belden® The Wire in Wireless®

CCB-Sub-Part Number

Plenum (Y/N):

No

Connectors

Suggested Connectors:

Mates with Land Mobil Radio type connectors.

Contact Information

PHONE_NUM:	1-800-Belden1
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EMEA Standard

EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
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Environmental Characteristics

Operating Temp Range:	-40°C To +75°C
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EU Directive

EU CE Mark:	No
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EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
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General Electrical Parameters

Sweep Testing:	100% Sweep tested to 6 GHz.
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North American Standard

CA Prop 65 (CJ for Wire & Cable):	Yes
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Series Type:	RF 300
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Temperature Range

Non-UL Temp Rating:	80°C
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Use

Suitability - Aerial:	Yes - When supported by a messenger
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Suitability - Burial:	Yes
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Suitability - Outdoor:	Yes
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Max Recommended Pulling Tension:	135 lbs
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Impedance:

Nominal Characteristic Impedance

50 Ohm

Inductance:

Nominal Inductance0.06 $\mu\text{H}/\text{ft}$ **Conductor DCR:****Nominal Conductor DCR**

2.1 Ohm/1000ft

Nominal Outer Shield DCR

2.4 Ohm/1000ft

Power Rating:**Frequency [MHz]****Nominal Power Rating [W]**

30 MHz

2,161 W

50 MHz

1,658 W

150 MHz

928 W

220 MHz

758 W

450 MHz

522 W

900 MHz

367 W

1,500 MHz

278 W

1,800 MHz

253 W

2,000 MHz

239 W

2,500 MHz

212 W

3,000 MHz

194 W

3,500 MHz

179 W

4,500 MHz

157 W

5,800 MHz

137 W

6,000 MHz

135 W

Delay:**Nominal Delay**

1.17 ns/ft

Nominal Velocity of Propagation (VP)

86 %

Voltage:**Non-UL Voltage Rating**

300V RMS

VSWR:

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

Capacitance:

Nominal Capacitance Conductor to Shield
23 pF/ft

High Frequency (Nominal/Typical):

Frequency (MHz)	Nom. Insertion Loss
5 MHz	0.45 db/100ft
10 MHz	0.6 db/100ft
30 MHz	1 db/100ft
50 MHz	1.3 db/100ft
150 MHz	2.2 db/100ft
220 MHz	2.7 db/100ft
450 MHz	3.9 db/100ft
900 MHz	5.6 db/100ft
1500 MHz	7.3 db/100ft
1800 MHz	8.1 db/100ft
2000 MHz	8.6 db/100ft
2500 MHz	9.7 db/100ft
3000 MHz	10.8 db/100ft
3500 MHz	11.8 db/100ft
4500 MHz	13.5 db/100ft
5800 MHz	15.8 db/100ft
6000 MHz	16 db/100ft

Insulation:

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.19 in

Outerjacket 1:

Material	Nominal Diameter
PE - Polyethylene	0.3 in

Conductor:

AWG	Stranding	Material	Nominal Diameter	No. of Coax
13	Solid	BC - Bare Copper	0.072 in	1

Outershield 1:

Type	Layer	Material	Material Trade Name	Coverage
Tape	1	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	Bonded Duofoil®	100 %
Braid	2	TC - Tinned Copper		95 %

Product Variants

Part Number	Color	Put-Up Type	Length
7809WB 0101000	BLACK	Reel	1000 ft
7809WB 010500	BLACK	Reel	500 ft

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