



7809R

Part Number: 7809R

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), PVC jacket.

Product Specifications

Conductor

Total Number of Conductors:	1
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Technical Specifications

APAC Standard

MII Order #39 (China RoHS):	Yes
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Bend Radius

Min Bend Radius/Minor Axis:	3 in
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CCB-Part Number

Notes:	Belden® The Wire in Wireless®
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CCB-Sub-Part Number

Plenum (Y/N):	No
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Connectors

Suggested Connectors:	Mates with Land Mobile Radio type connectors.
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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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Suitability - Indoor:	Yes
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EU Directive

EU CE Mark:	Yes
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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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CEC/C(UL) Specification:	CMG
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NEC/(UL) Specification:	CMR
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Series Type:	RF 300
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Safety

UL Flammability:	UL1666 Vertical Shaft
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CSA Flammability:	FT4
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Temperature Range

UL Temp Rating:	60°C
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Use

Max Recommended Pulling Tension:	135 lbs
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Impedance:

Nominal Characteristic Impedance

50 Ohm

Inductance:

Nominal Inductance

0.06 μ H/ft

Conductor DCR:

Nominal Conductor DCR	Nominal Outer Shield DCR
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2.1 Ohm/1000ft	2.4 Ohm/1000ft
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Power Rating:

Frequency [MHz]	Nominal Power Rating [W]
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30 MHz	2,161 W
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50 MHz	1,658 W
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150 MHz	928 W
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220 MHz	758 W
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450 MHz	522 W
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900 MHz	367 W
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1,500 MHz	522 W
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1,800 MHz	253 W
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2,000 MHz	239 W
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2,500 MHz	212 W
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3,000 MHz	194 W
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3,500 MHz	179 W
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4,500 MHz	157 W
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5,800 MHz	137 W
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6,000 MHz	135 W
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Delay:

Nominal Delay	Nominal Velocity of Propagation (VP)
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1.17 ns/ft	86 %
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Voltage:

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
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Insulation:

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

Outerjacket 1:

Material	Nominal Diameter
PVC - Polyvinyl Chloride	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
7809R 0101000	BLACK	Reel	1000 ft
7809R 010500	BLACK	Reel	500 ft

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