

## 7809R Coax - Intermediate Type



For more Information  
please call

1-800-Belden1

**Description:**

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

**Physical Characteristics (Overall)****Conductor****AWG:**

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	13	Solid	BC - Bare Copper	.072

**Insulation****Insulation Material:**

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.190

**Outer Shield****Outer Shield Material:**

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

**Outer Jacket****Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

**Overall Cable**

Overall Nominal Diameter: 0.300 in.

**Mechanical Characteristics (Overall)**

Operating Temperature Range:	-40°C To +75°C
UL Temperature Rating:	80°C
Bulk Cable Weight:	53 lbs/1000 ft.
Max. Recommended Pulling Tension:	135 lbs.
Min. Bend Radius (Install)/Minor Axis:	0.880 in.

**Applicable Specifications and Agency Compliance (Overall)****Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes

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EU Directive 2003/11/EC (BFR):	Yes
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CA Prop 65 (CJ for Wire & Cable):	Yes
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MII Order #39 (China RoHS):	Yes
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Series Type:	RF 300
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**Flame Test**

UL Flame Test:	UL1666 Vertical Shaft
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CSA Flame Test:	FT4
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**Suitability**

Suitability - Indoor:	Yes
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Suitability - Outdoor:	Yes
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Suitability - Aerial:	Yes - When supported by a messenger wire
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**Plenum/Non-Plenum**

Plenum (Y/N):	No
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**Electrical Characteristics (Overall)****Nom. Characteristic Impedance:**

Impedance (Ohm)
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50
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**Nom. Inductance:**

Inductance (μH/ft)
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0.060
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**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/ft)
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23.0
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**Nominal Velocity of Propagation:**

VP (%)
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86
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**Nominal Delay:**

Delay (ns/ft)
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1.17
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**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)
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2.1
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**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)
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2.4
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**Maximum VSWR:**

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Max. VSWR
		5	6000	1.25:1

**Nom. Attenuation:**

Freq. (MHz)	Attenuation (dB/100 ft.)
30	1.0
50	1.3
150	2.2
220	2.7
450	3.9
900	5.6
1500	7.3
1800	8.1
2000	8.6
2500	9.7
3000	10.8

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3500	11.8
4500	13.5
5800	15.8
6000	16.0

**Nom. Power Rating:**

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

**Max. Operating Voltage - UL:**

Voltage
300 V RMS

**Sweep Test**

**Sweep Testing:** 100% Sweep tested to 6 GHz.

**Misc. Information (Overall)****Notes (Overall)**

**Notes:** Belden® The Wire in Wireless®

**Related Documents:**

No related documents are available for this product

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7809R 0101000	1,000 FT	65.000 LB	BLACK	C	RF300 WIRELESS 50OHM COAXFRPVC
7809R 010500	500 FT	34.000 LB	BLACK	C	RF300 WIRELESS 50OHM COAXFRPVC

**Notes:**

C = CRATE REEL PUT-UP.

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Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.