# **Detailed Specifications & Technical Data**

### **ENGLISH MEASUREMENT VERSION**



### 7809A 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), polyethylene jacket.

1

### **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

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

Total Number of Conductors:

#### Insulation

#### **Insulation Material:**

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

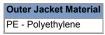
#### **Outer Shield**

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

Layer #	ayer # 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:**



### **Overall Cable**

Overall Nominal Diameter: 0.300 in.

### **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-40°C To +75°C
Non-UL Temperature Rating:	80°C
Bulk Cable Weight:	54 lbs/1000 ft.
Max. Recommended Pulling Tension:	135 lbs.
Min. Bend Radius/Minor Axis:	3 in.

## **Applicable Specifications and Agency Compliance (Overall)**

### **Applicable Standards & Environmental Programs**

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
EU Directive 2002/96/EC (WEEE):	Yes

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	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
Sui	tability	
	Suitability - Outdoor:	Yes
	Suitability - Aerial:	Yes - When supported by a messenger wire
	Suitability - Burial:	Yes
Ple	num/Non-Plenum	
	Plenum (Y/N):	No

### **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm) 50

Nom. Inductance:

Inductance (µH/ft) 0.060

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft) 23.0

Nominal Velocity of Propagation:

**VP (%)** 86

Nominal Delay:

Delay (ns/ft) 1.17

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 2.1

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 2.4

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.)
5.000	0.450
10.000	0.600
30.000	1.000
50.000	1.300
150.000	2.200
220.000	2.700
450.000	3.900
900.000	5.600
1500.000	7.300
1800.000	8.100
2000.000	8.600
2500.000	9.700
3000.000	10.800
3500.000	11.800
4500.000	13.500

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5800.000	15.800
6000.000	16.000

#### 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. 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® The Wire in Wireless®

# **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7809A 0101000	1,000 FT	58.000 LB	BLACK	С	RF300 WIRELESS 50 OHM COAX PE
7809A 010500	500 FT	30.500 LB	BLACK	С	RF300 WIRELESS 50 OHM COAX PE

Notes:

C = CRATE REEL PUT-UP.

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