# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



#### 7789A Coax - Bundled Miniature



For more Information please call

1-800-Belden1



#### **General Description:**

Miniature, 23 AWG solid .023" bare copper conductors, solid copper, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), overall PVC jacket.

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## **Physical Characteristics (Overall)**

## Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
5	23	Solid	BC - Bare Copper	.023

Total Number of Conductors:

#### Insulation

#### Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.102

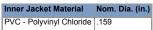
#### **Inner Shield**

#### Inner Shield Material:

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

#### Inner Jacket

#### Inner Jacket Material:



### Inner Jacket Color Code Chart:

Number	Color
1	Red
2	Green
3	Blue
4	White
5	Yellow

#### **Outer Jacket**

#### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

#### **Overall Cable**

Overall Nominal Diameter: 0.539 in.

## Mechanical Characteristics (Overall)

Operating Temperature Range:	-35°C To +75°C
UL Temperature Rating:	60°C
Non-UL Temperature Rating:	75°C
Bulk Cable Weight:	136 lbs/1000 ft.
Max. Recommended Pulling Tension:	180 lbs.
Min. Bend Radius/Minor Axis:	5.500 in.

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

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

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
EU Directive 2011/65/EU (ROHS II):	Yes

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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	
EU Directive 2003/11/EC (BFR): Yes	
CA Prop 65 (CJ for Wire & Cable): Yes	
MII Order #39 (China RoHS): Yes	
RG Type: Mini	
Flame Test	
UL Flame Test: UL1666 Vertical Shaft	
CSA Flame Test: FT4	
Suitability	
Suitability - Indoor: Yes	
Suitability - Outdoor: Yes	
Plenum/Non-Plenum	
Plenum (Y/N): No	

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Inductance:

Inductance (µH/ft)

Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



Nominal Delay:

Delay (ns/ft) 1.24

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 7.6

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1.000	0.400
3.600	0.800
10.000	1.200
71.500	3.100
135.000	3.800
270.000	5.400
360.000	6.200
540.000	7.700
720.000	9.100
750.000	9.500
1000.000	10.500
1500.000	13.000
2500.000	16.900
3000.000	18.500
4500.000	24.600

Max. Operating Voltage - UL:

Voltage

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300 V RMS

Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge Other Electrical Characteristic 1:

and termination.

Other Electrical Characteristic 2: Return Loss Tested in Accordance With ASTM D-4566 Paragraph 45.3, Using a 75 Ohm Fixed Bridge and

Termination.

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5.000	1600.000	23.000
1600.000	4500.000	21.000

**Sweep Test** 

Sweep Testing: Sweep tested 5 MHz to 4.5 GHz

#### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7789A B591000	1,000 FT	151.000 LB	BLACK, MATTE	С	5 #23 PE/GIFHDPE SH PVC PVC
7789A B59500	500 FT	75.500 LB	BLACK, MATTE	С	5 #23 PE/GIFHDPE SH PVC PVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 05-06-2013

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