# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



## 7789A Coax - Bundled Miniature

For more Information please call

1-800-Belden1



# **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.

# **Physical Characteristics (Overall)**

## Conductor

#### AWG:

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

#### 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	Туре	Inner Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

# **Inner Jacket**

### Inner Jacket Material:

Inner Jacket Material	Nom. Dia. (in.)
PVC - Polyvinyl Chloride	.159

### **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 Cabling**

Overall Nominal Diameter: 0.539 in.

Me	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:	131 lbs/1000 ft.				
	Max. Recommended Pulling Tension:	180 lbs.				
	Min. Bend Radius (Install)/Minor Axis:	5.500 in.				

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

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Inductance:

Inductance (µH/ft) 0.106

Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:



Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 7.6

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	0.4
3.6	0.8
10	1.2

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71.5	3.1
135	3.8
270	5.4
360	6.2
540	7.7
720	9.1
750	9.5
1000	10.5
1500	13.0
2500	16.9
3000	18.5

#### Max. Operating Voltage - UL:

Voltage 300 V RMS

Other Electrical Characteristic 1: Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2

using a 75 Ohm fixed bridge 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	850	23
851	3000	15

#### **Sweep Test**

Sweep Testing: Sweep tested 5 MHz to 3 GHz.

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

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7789A B591000	1,000 FT	146.000 LB	BLACK, MATTE	С	5 #23 PE/GIFHDPE SH PVC PVC
7789A B59500	500 FT	73.000 LB	BLACK, MATTE	С	5 #23 PE/GIFHDPE SH PVC PVC

#### Notes:

C = CRATE REEL PUT-UP.

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