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.

5

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		Type	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 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.

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Min. Bend Radius/Minor Axis:	5.500 in.		
pplicable Specifications and Agency Co	ompliance (Overall)		
Applicable Standards & Environmental Programs			
NEC/(UL) Specification:	CMR		
CEC/C(UL) Specification:	CMG		
EU Directive 2011/65/EU (ROHS II):	Yes		
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		
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		

Nom. Characteristic Impedance:

Impedance	(Ohm)
75	

Nom. Inductance:



Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.5

Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

Nom. Attenuation:

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

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