

Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

7788A 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.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
4	23	Solid	BC - Bare Copper	.023

Total Number of Conductors: 4

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

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 0.481 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: 103 lbs/1000 ft.

Max. Recommended Pulling Tension: 144 lbs.

Min. Bend Radius/Minor Axis: 5 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

EU CE Mark: 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
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Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (μH/ft)
0.106

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.5

Nominal Velocity of Propagation:

VP (%)
83

Nominal Delay:

Delay (ns/ft)
1.24

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
20.1

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
300 V RMS

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Other Electrical Characteristic 1:

Impedance tested in accordance with ASIM I-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)
5.000	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
7788A B591000	1,000 FT	110.000 LB	BLACK, MATTE	C	4 #23 PE/GIFHDPE SH PVC PVC

Notes:

C = CRATE REEL PUT-UP.

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