Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



7787A 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.

Usage (Overall)

Suitable Applications:

SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080p, SDI/HDTV Digital Video, High Definition (HD), Standard Definition (SDI)

Physical Characteristics (Overall)

Conductor

AWG:



Total Number of Conductors:

3

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

Outer Jacket

Outer Jacket Material:



Overall Cable

Overall Nominal Diameter: 0.440 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-35°C To +75°C
Bulk Cable Weight:	85 lbs/1000 ft.
Max. Recommended Pulling Tension:	108 lbs.
Min. Bend Radius/Minor Axis:	4.500 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
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 - Black only.	
Suitability - Burial:	No	
Plenum/Non-Plenum		
Plenum (Y/N):	No	

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 75.000

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)

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
6000.000	28.970

Max. Operating Voltage - UL:

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Voltage 300 V RMS

Other Electrical Characteristic 1:

Return Loss: 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
4500.000	6000.000	15.000

Sweep Test

Sweep Testing:

Sweep tested 5 MHz to 6 GHz.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7787A B591000	1,000 FT	94.000 LB	BLACK, MATTE	С	3 #23 PE/GIFHDPE SH PVC PVC
7787A B59500	500 FT	47.500 LB	BLACK, MATTE	С	3 #23 PE/GIFHDPE SH PVC PVC

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 3 Revision Date: 04-14-2017

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