

# Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



## 1695A Coax - Low Loss Serial Digital Coax

For more Information  
please call

1-800-Belden1



### General Description:

Low Loss Serial Digital Coax, Plenum-CMP, RG6 18 AWG solid bare copper conductor, foam FEP core, Duofoil®+95% tinned copper braid, Flamarrest® jacket

### Usage (Overall)

Suitable Applications: SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080p

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	18	Solid	BC - Bare Copper	.040

Total Number of Conductors: 1

#### Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)
Teflon®	FFEP - Foam Fluorinated Ethylene Propylene	.170

#### Outer Shield

Outer Shield Material:

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

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

#### Overall Cable

Overall Nominal Diameter: 0.229 in.

### Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +75°C

UL Temperature Rating: 75°C

Bulk Cable Weight: 41 lbs/1000 ft.

Max. Recommended Pulling Tension: 69 lbs.

Min. Bend Radius/Minor Axis: 2.500 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC(UL) Specification: CMP

CEC/C(UL) Specification: CMP

EU Directive 2011/65/EU (ROHS II): Yes

EU CE Mark: No

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 04/01/2005

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

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MII Order #39 (China RoHS): Yes

RG Type: 6/U

### Flame Test

UL Flame Test: NFPA 262

CSA Flame Test: FT6

### Suitability

Suitability - Indoor: Yes

### Plenum/Non-Plenum

Plenum (Y/N): Yes

Non-Plenum Number: 1694A

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

75

### Nom. Inductance:

Inductance (µH/ft)

0.103

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

16.1

### Nominal Velocity of Propagation:

VP (%)

82

### Nominal Delay:

Delay (ns/ft)

1.24

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

6.4

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

2.8

### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1.000	0.240
3.580	0.450
5.000	0.550
7.000	0.650
10.000	0.750
67.500	1.740
71.500	1.780
88.500	1.940
100.000	2.100
135.000	2.400
143.000	2.500
180.000	2.800
270.000	3.400
360.000	4.000
540.000	5.200
720.000	6.100
750.000	6.200
1000.000	7.400
1500.000	9.500
2000.000	11.300
2250.000	12.200
3000.000	14.600
4500.000	18.600
6000.000	22.400

### Max. Operating Voltage - UL:

Voltage

300 V RMS

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Other Electrical Characteristic 1: Impedance: 75 +/- 3 Ohms

Other Electrical Characteristic 2: 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: 100&#37; Sweep tested 5 MHz to 6 GHz.

### Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc. Print legend includes sequential footage marks.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1695A N3U1000	1,000 FT	44.000 LB	GREEN, MIL	C	#18 FFEP SH FLRST
1695A 0011000	1,000 FT	44.000 LB	BROWN	C	#18 FFEP SH FLRST
1695A 0021000	1,000 FT	44.000 LB	RED	C	#18 FFEP SH FLRST
1695A 0031000	1,000 FT	44.000 LB	ORANGE	C	#18 FFEP SH FLRST
1695A 0041000	1,000 FT	44.000 LB	YELLOW	C	#18 FFEP SH FLRST
1695A 0061000	1,000 FT	44.000 LB	BLUE, LIGHT	C	#18 FFEP SH FLRST
1695A 006500	500 FT	22.000 LB	BLUE, LIGHT		#18 FFEP SH FLRST
1695A 0071000	1,000 FT	44.000 LB	VIOLET	C	#18 FFEP SH FLRST
1695A 0075000	5,000 FT	220.000 LB	VIOLET		#18 FFEP SH FLRST
1695A 0081000	1,000 FT	44.000 LB	GRAY	C	#18 FFEP SH FLRST
1695A 0101000	1,000 FT	44.000 LB	BLACK	C	#18 FFEP SH FLRST
1695A 010500	500 FT	22.000 LB	BLACK	C	#18 FFEP SH FLRST
1695A 0105000	5,000 FT	210.000 LB	BLACK	C	#18 FFEP SH FLRST
1695A 8771000	1,000 FT	44.000 LB	NATURAL	C	#18 FFEP SH FLRST
1695A 877500	500 FT	22.000 LB	NATURAL	Z	#18 FFEP SH FLRST

### Notes:

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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