

## 1794A Coax - Low Loss Serial Digital Coax



For more Information  
please call

1-800-Belden1



### Description:

16 AWG solid 0.051" bare copper conductor, gas-injected foamed high-density polyethylene insulation, Duofoil® + tinned copper braid shield (95% coverage) plus Beldfoil® with shorting fold, PVC jacket.

### Usage (Overall)

**Suitable Applications:** SMPTE 424M 3 Gb/s HD-SDI 1080p

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	16	Solid	BC - Bare Copper	0.051

**Total Number of Conductors:** 1

#### Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	0.225

#### Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100.000
2		Braid	TC - Tinned Copper	95.000
3	Beldfoil® with shorting fold	Tape	Polyester Tape-Aluminum Foil	100.000

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

#### Overall Cable

**Overall Nominal Diameter:** 0.320 in.

### Mechanical Characteristics (Overall)

**Operating Temperature Range:** -30°C To +75°C

**Bulk Cable Weight:** 59 lbs/1000 ft.

**Max. Recommended Pulling Tension:** 111 lbs.

**Min. Bend Radius/Minor Axis:** 3.250 in.

### 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

## 1794A Coax - Low Loss Serial Digital Coax

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
Series Type:	Series 7

### Flame Test

UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4

### Suitability

Suitability - Indoor:	Yes
-----------------------	-----

### Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

75

### Nom. Inductance:

Inductance (µH/ft)

0.091

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

16.100

### Nominal Velocity of Propagation:

VP (%)

84.000

### Nominal Delay:

Delay (ns/ft)

1.210

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

4.000

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

1.900

### Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100 ft.)

1.000	0.170
3.580	0.300
5.000	0.350
6.000	0.380
7.000	0.400
10.000	0.480
12.000	0.520
25.000	0.740
55.000	1.080
67.500	1.200
71.500	1.240
88.500	1.370
100.000	1.460

## 1794A Coax - Low Loss Serial Digital Coax

135.000	1.700
143.000	1.750
180.000	1.970
270.000	2.430
360.000	2.830
540.000	3.500
720.000	4.090
750.000	4.180
1000.000	4.890
1500.000	6.100
2000.000	7.200
2250.000	7.690
3000.000	9.080
4500.000	11.530

### 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. 75 +/- 3 Ohms

**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	1600	23
1600	4500	21

### Sweep Test

**Sweep Testing:** 100% Sweep tested 5 MHz to 4.5 GHz.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1794A N3U1000	1,000 FT	63.000 LB	GREEN, MIL	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0011000	1,000 FT	63.000 LB	BROWN	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0021000	1,000 FT	63.000 LB	RED	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0031000	1,000 FT	63.000 LB	ORANGE	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0041000	1,000 FT	63.000 LB	YELLOW	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0061000	1,000 FT	63.000 LB	BLUE, LIGHT	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0071000	1,000 FT	63.000 LB	VIOLET	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0081000	1,000 FT	63.000 LB	GRAY	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0091000	1,000 FT	63.000 LB	WHITE	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0101000	1,000 FT	63.000 LB	BLACK	C	#16 LDPE/GIFHDLDP SH FRPVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 1    Revision Date: 05-12-2010

© 2012 Belden, Inc  
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide

## 1794A Coax - Low Loss Serial Digital Coax

for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product. Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.