

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.