



Product: [1694A](#)

Serial Digital Coax, RG6 Type, #18 Solid BC, Duofoil® + 95% TC braid, CMR

Product Description

Low Loss Serial Digital Coax, Riser-CMR, RG6 Type, 18 AWG solid bare copper conductor, foam HDPE core, Duobond® +95% tinned copper braid, PVC jacket

Technical Specifications

Product Overview

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

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
18	Solid	BC - Bare Copper	0.04 in	1

Conductor Count:	1
------------------	---

Insulation

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.18 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminium / Polyester / Aluminium	Duofoil®	100 %
Braid	2	TC - Tinned Copper		95.0 %

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.274 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Outer Conductor DCR
6.4 Ohm/1000ft	2.8 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
16.2 pF/ft

Inductance

Nominal Inductance
0.106 µH/ft

Impedance

Nominal Characteristic Impedance
75 Ohm

Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5 - 1600 MHz	23 dB
1600 - 4500 MHz	21 dB
4500 - 6000 MHz	15 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.24 dB/100ft
3.58 MHz	0.44 dB/100ft
5 MHz	0.52 dB/100ft
6 MHz	0.57 dB/100ft
7 MHz	0.61 dB/100ft
10 MHz	0.71 dB/100ft
12 MHz	0.78 dB/100ft
25 MHz	1.08 dB/100ft
67.5 MHz	1.65 dB/100ft
71.5 MHz	1.69 dB/100ft
88.5 MHz	1.86 dB/100ft
100 MHz	1.95 dB/100ft
135 MHz	2.24 dB/100ft
143 MHz	2.3 dB/100ft
180 MHz	2.57 dB/100ft
270 MHz	3.17 dB/100ft
360 MHz	3.69 dB/100ft
540 MHz	4.5 dB/100ft
720 MHz	5.3 dB/100ft
750 MHz	5.4 dB/100ft
1000 MHz	6.3 dB/100ft
1500 MHz	7.8 dB/100ft
2000 MHz	9.2 dB/100ft
2250 MHz	9.8 dB/100ft
3000 MHz	11.5 dB/100ft
4500 MHz	14.5 dB/100ft
6000 MHz	17.7 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.24 ns/ft	82 %

Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes:	Return Loss: Fixed bridge and termination
-----------------------------------	---

Temperature Range

UL Temp Rating:	75°C
Operating Temp Range:	-30°C To +75°C

Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	41 lbs/1000ft
Max Recommended Pulling Tension:	69 lbs
Min Bend Radius/Minor Axis:	2.75 in

Standards

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
CPR Euroclass:	Eca
RG Type:	6/U Type

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft
CSA Flammability:	FT4
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1695A

Part Number

Related Parts:	1694ABHD1, 1694ABHD3, 1694ABHDL
----------------	---------------------------------

Variants

Item #	Color	UPC	Length	Footnote
1694A.001000	Black		1,000 m	
1694A.001372	Black		1,372 m	
1694A.00152	Black		152 m	
1694A.00305	Black		305 m	
1694A.00500	Black		500 m	
1694A 0101000	Black	612825358190	1,000 ft	C
1694A 010500	Black	612825358169	500 ft	C
1694A 0105000	Black	612825358183	5,000 ft	C N
1694A.K0305	Black		305 m	
1694A 010N1000	Black		1,000 ft	
1694A 010Z1000	Black	612825434702	1,000 ft	
1694A 010Z500	Black	612825434726	500 ft	
1694A 01010000	Black	612825435631	10,000 ft	
1694A.051372	Blue		1,372 m	
1694A.05305	Blue		305 m	
1694A 0061000	Blue, Light	612825358220	1,000 ft	C
1694A 0065000	Blue, Light	612825356189	5,000 ft	C N
1694A 006Z1000	Blue, Light	612825434597	1,000 ft	
1694A 00610000	Blue, Light	612825440352	10,000 ft	
1694A 0011000	Brown	612825358268	1,000 ft	C
1694A 0015000	Brown	612825356240	5,000 ft	C N
1694A 00110000	Brown	612825440369	10,000 ft	
1694A.09500	Cream		500 m	
1694A 0081000	Gray	612825356165	1,000 ft	C
1694A 0085000	Gray	612825356158	5,000 ft	C N
1694A 00810000	Gray	612825435617	10,000 ft	
1694A.081372	Gray, Slate		1,372 m	

1694A.08305	Gray, Slate		305 m	
1694A.061219	Green		1,219 m	
1694A.061372	Green		1,372 m	
1694A.06152	Green		152 m	
1694A.06305	Green		305 m	
1694A.064000	Green		4,000 m	
1694A N3U1000	Green, Mil	612825358275	1,000 ft	C
1694A N3U5000	Green, Mil	612825356257	5,000 ft	C N
1694A N3UN1000	Green, Mil		1,000 ft	
1694A N3U10000	Green, Mil	612825435648	10,000 ft	
1694A.031372	Orange		1,372 m	
1694A.03305	Orange		305 m	
1694A 0031000	Orange	612825358251	1,000 ft	C
1694A 003Z1000	Orange	612825434535	1,000 ft	
1694A 00310000	Orange	612825435655	10,000 ft	
1694A.K3305	Orange		305 m	
1694A.011372	Red		1,372 m	
1694A.01305	Red		305 m	
1694A 0021000	Red	612825358244	1,000 ft	C
1694A 0025000	Red	612825356264	5,000 ft	C N
1694A 002Z1000	Red	612825434443	1,000 ft	
1694A 00210000	Red	612825440376	10,000 ft	
1694A.K1305	Red		305 m	
1694A.021372	Violet		1,372 m	
1694A.02305	Violet		305 m	
1694A 0071000	Violet	612825358213	1,000 ft	C
1694A 0075000	Violet	612825356172	5,000 ft	C N
1694A.021000	Violet		1,000 m	
1694A 007N1000	Violet	612825366966	1,000 ft	
1694A 007Z1000	Violet	612825434665	1,000 ft	
1694A 00710000	Violet	612825435303	10,000 ft	
1694A.K2305	Violet		305 m	
1694A.071372	White		1,372 m	
1694A.07305	White		305 m	
1694A 0091000	White	612825358206	1,000 ft	C
1694A 009N1000	White		1,000 ft	
1694A 009Z1000	White	612825434672	1,000 ft	
1694A 00910000	White	612825435624	10,000 ft	
1694A.041372	Yellow		1,372 m	
1694A.04305	Yellow		305 m	
1694A 0041000	Yellow	612825358237	1,000 ft	C
1694A 004N1000	Yellow		1,000 ft	
1694A 004Z1000	Yellow	612825434542	1,000 ft	
1694A 00410000	Yellow	612825440383	10,000 ft	

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	N - FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

History

Update and Revision:	Revision Number: 0.331 Revision Date: 01-31-2020
----------------------	--

© 2020 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 here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The 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.