

Part Number: 1694A

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

Product Description

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

Technical Specifications

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

Construction and Dimensions

Conductor:

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

Total Number of Conductors:	1
-----------------------------	---

Insulation:

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

Outershield 1:

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum Foil-Polyester Tape-Aluminum Foil	Duofoil®	100 %
Braid	2	TC - Tinned Copper		95 %

Outerjacket 1:

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.274 in

Electrical Characteristics

Conductor DCR:

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

Capacitance:

Nom. Capacitance Conductor to Shield	
16.2 pF/ft	
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 +/- 1.5 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.
Sweep Testing:	100% Sweep tested 5 MHz to 6 GHz.

Impedance:

Nominal Characteristic Impedance
75 Ohm

High Frequency (Nominal/Typical):

Frequency [MHz]	Norm. 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	4.6 dB/100ft
720 MHz	5.38 dB/100ft
750 MHz	5.5 dB/100ft
1000 MHz	6.42 dB/100ft
1500 MHz	7.99 dB/100ft
2000 MHz	9.37 dB/100ft
2250 MHz	10.01 dB/100ft
3000 MHz	11.78 dB/100ft
4500 MHz	14.92 dB/100ft
6000 MHz	17.19 dB/100ft

Delay:

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

High Freq:

Min. RL (Return Loss) [dB]
23 dB
21 dB

Inductance:

Nominal Inductance	
0.106 μ H/ft	

Voltage:

UL Voltage Rating	
300V RMS V	

Use

Suitability - Indoor:	Yes
Max Recommended Pulling Tension:	69 lbs

Safety

CSA Flammability:	FT4
UL Flammability:	UL1666 Vertical Shaft

Temperature Range

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

Mechanical Characteristics

Min Bend Radius/Minor Axis:	2.75 in
-----------------------------	---------

Part Number

Plenum (Y/N):	No
Plenum Number:	1695A
Suggested Connectors:	AMP 221185-1 Dual Crimp Gold Pin BNC (75 Ohms); Amphenol 31-70000 Dual Crimp Gold Pin BNC (75 Ohms); Kings 2065-10-9 Dual Crimp Gold Pin (75 Ohms); Trompeter UPL220-20 Dual Crimp Gold Pin BNC (75 Ohm); ADC BNC-1694D Dual Crimp Gold Pin BNC (75 Ohm)

Standards

CA Prop 65 (CJ for Wire & Cable):	Yes
CEC/C(UL) Specification:	CMG
MII Order #39 (China RoHS):	Yes
NEC/(UL) Specification:	CMR
RG Type:	6/U
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)

EU CE Mark:	Yes
-------------	-----

History

Notes:	Also available in 4.5 GHz multi-coax bundled versions. See 7710A through 7713A.
--------	---

Product Variants

Part Number	Color	Put-Up Type	Length
1694A	BROWN	Reel	1000 ft
1694A	BROWN	Reel	305 m
1694A 0011000	BROWN	Reel	1000 ft
1694A	BROWN	Reel	5000 ft
1694A 0015000	BROWN	Reel	5000 ft
1694A	RED	Reel	1000 ft
1694A	RED	Reel	305 m
1694A 0021000	RED	Reel	1000 ft
1694A	RED	Reel	5000 ft
1694A 0025000	RED	Reel	5000 ft
1694A	ORANGE	Reel	1000 ft
1694A	ORANGE	Reel	305 m
1694A 0031000	ORANGE	Reel	1000 ft
1694A	YELLOW	Reel	1000 ft
1694A	YELLOW	Reel	305 m
1694A 0041000	YELLOW	Reel	1000 ft
1694A			
1694A			
1694A	BLUE, LIGHT	Reel	1000 ft
1694A	BLUE, LIGHT	Reel	305 m
1694A 0061000	BLUE, LIGHT	Reel	1000 ft
1694A	BLUE, LIGHT	Reel	5000 ft
1694A	BLUE, LIGHT	Reel	1524 m
1694A 0065000	BLUE, LIGHT	Reel	5000 ft
1694A	VIOLET	Reel	1000 ft
1694A	PURPLE	Reel	305 m
1694A 0071000	VIOLET	Reel	1000 ft
1694A	VIOLET	Reel	5000 ft

1694A	PURPLE	Reel	1524 m
1694A 0075000	VIOLET	Reel	5000 ft
1694A			
1694A			
1694A	GRAY	Reel	1000 ft
1694A	GRAY	Reel	305 m
1694A 0081000	GRAY	Reel	1000 ft
1694A	GRAY	Reel	5000 ft
1694A 0085000	GRAY	Reel	5000 ft
1694A	WHITE	Reel	1000 ft
1694A	WHITE	Reel	305 m
1694A 0091000	WHITE	Reel	1000 ft
1694A			
1694A			
1694A	BLACK	Reel	1000 ft
1694A	BLACK	Reel	305 m
1694A 0101000	BLACK	Reel	1000 ft
1694A	BLACK	Reel	5000 ft
1694A	BLACK	Reel	1524 m
1694A 0105000	BLACK	Reel	5000 ft
1694A	BLACK	Reel	500 ft
1694A	BLACK	Reel	152 m
1694A 010500	BLACK	Reel	500 ft
1694A			
1694A			
1694A	BLACK	Reel	305 m
1694A	GREEN, MIL	Reel	1000 ft
1694A	MIL GREEN	Reel	305 m
1694A N3U1000	GREEN, MIL	Reel	1000 ft
1694A	GREEN, MIL	Reel	5000 ft
1694A	MIL GREEN	Reel	1524 m
1694A N3U5000	GREEN, MIL	Reel	5000 ft
1694A			
1694A			
1694A+00305	BLACK	Reel	305 m
1694A.001000	BLACK	Reel	1000 m

1694A.001372	BLACK	Reel	1372 m
1694A.00152	BLACK	Reel	152 m
1694A.00305	BLACK	Reel	305 m
1694A.00500	BLACK	Reel	500 m
1694A.011372	RED, RAL 3000	Reel	1372 m
1694A.01305	RED, RAL 3000	Reel	305 m
1694A	VIOLET	Reel	1000 m
1694A.021372	VIOLET	Reel	1372 m
1694A.02305	VIOLET	Reel	305 m
1694A.031372	ORANGE, RAL 2003	Reel	1372 m
1694A.03305	ORANGE, RAL 2003	Reel	305 m
1694A.041372	YELLOW, RAL 1021	Reel	1372 m
1694A.04305	YELLOW, RAL 1021	Reel	305 m
1694A.051372	BLUE, RAL 5015	Reel	1372 m
1694A.05305	BLUE, RAL 5015	Reel	305 m
1694A.061219	GREEN	Reel	1219 m
1694A.061372	GREEN	Reel	1372 m
1694A.06152	GREEN	Reel	152 m
1694A.06305	GREEN	Reel	305 m
1694A.064000	GREEN	Reel	4000 m
1694A.071372	WHITE	Reel	1372 m
1694A.07305	WHITE	Reel	305 m
1694A.081372	GRAY, SLATE	Reel	1372 m
1694A.08305	GRAY, SLATE	Reel	305 m
1694A.09500	CREAM	Reel	500 m
1694A	BLACK	Reel	305 m
1694A			
1694A			

© 2017 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 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.