Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

1694A Coax - Low Loss Serial Digital Coax



For more Information please call

1-800-Belden1



General Description:

RG-6/U Type, 18 AWG solid .040" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), PVC jacket.

Phys	ical Characteristics (Over	all)	-	
Cond	luctor	,		
AW				
	# Coax AWG Stranding Conduct 1 18 Solid BC - Bare			
L				
_	Total Number of Conductors:		1	
	ation ulation Material:			
-	Insulation Material	Dia. (mm	1)	
	Gas-injected FHDPE - Foam High D	ensity Polyethylene 4.572		
	r Shield			
_	ter Shield Material:	Tune Outer Chield Meteric		Coverane (9/)
	Layer # Outer Shield Trade Name 1 Duofoil®	Tape Aluminum Foil-Polyes		Coverage (%)
	2	Braid TC - Tinned Copper		95
L Oute	r Jacket	1 1		
	ter Jacket Material:			
	Outer Jacket Material			
	PVC - Polyvinyl Chloride			
Over	all Cable			
C	Overall Nominal Diameter:		6.960 mm	
Nech	nanical Characteristics (Ov	verall)		
	Operating Temperature Range:		-30°C To +75°C	
	Bulk Cable Weight:			
_	-		61.016 Kg/Km	
_	Max. Recommended Pulling Tensio	on:	306.926 N	
Ν	Min. Bend Radius/Minor Axis:		69.850 mm	
Appli	icable Specifications and	Agency Compliance	(Overall)	
	icable Standards & Environm		. ,	
N	NEC/(UL) Specification:		CMR	
Ċ	CEC/C(UL) Specification:		CMG	
E	EU Directive 2011/65/EU (ROHS II):		Yes	
_	EU CE Mark:		Yes	
_				
_	EU Directive 2000/53/EC (ELV):		Yes	
E	EU Directive 2002/95/EC (RoHS):		Yes	
	EU RoHS Compliance Date (mm/dd	d/yyyy):	01/01/2004	
E	EU Directive 2002/96/EC (WEEE):		Yes	
E	EU Directive 2003/11/EC (BFR):		Yes	
Ċ	CA Prop 65 (CJ for Wire & Cable):		Yes	
N	MII Order #39 (China RoHS):		Yes	
_	RG Type:		6/U	
_	ko Toot		0/0	

Flame Test

UL1666 Vertical Shaft

Detailed Specifications & Technical Data





1694A Coax - Low Loss Serial Digital Coax

itability			
Suitability	- Indoor:	Yes	
Suitability	- Outdoor:	Yes - Black only.	
Suitability		Yes - Black only, when supported by messenger wire.	
Suitability		No	
enum/Non-	-Plenum		
Plenum (Y	(/N):	No	
Plenum N	umber:	1695A	
	haracteristics (Ove	erall)	
	ristic Impedance:		
Impedance 75	(Onm)		
m. Inductan			
Inductance 0.347786	(μH/m)		
	nce Conductor to Shield	l:	
Capacitance	e (pF/m)		
53.1522			
	ity of Propagation:		
VP (%) 82			
minal Delay:			
Delay (ns/m	1)		
4.06844			
m. Conducto	or DC Resistance:		
m. Conducto DCR @ 20°C			
m. Conducto			
m. Conducto DCR @ 20°C 20.9984			
m. Conducto DCR @ 20°C 20.9984	C (Ohm/km) Shield DC Resistance:		
m. Conducto DCR @ 20°C 20.9984 minal Outer	C (Ohm/km) Shield DC Resistance:		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C	C (Ohm/km) Shield DC Resistance: C (Ohm/km)		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati	C (Ohm/km) Shield DC Resistance: C (Ohm/km)	1	
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati	C (Ohm/km) Shield DC Resistance: C (Ohm/km)		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz)	C (Ohm/km) Shield DC Resistance: C (Ohm/km) jon: Attenuation (dB/100m)		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) ion: Attenuation (dB/100m) 0.787		
m. Conductor DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) ion: Attenuation (dB/100m) 0.787 1.444 1.706 1.870		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) ion: Attenuation (dB/100m) 0.787 1.444 1.706 1.870 2.001		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) ion: Attenuation (dB/100m) 0.787 1.444 1.706 1.870 2.001 2.330		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) ion: Attenuation (dB/100m) 0.787 1.444 1.706 1.870 2.001 2.330 2.559		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) ion: Attenuation (dB/100m) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500	C (Ohm/km) Shield DC Resistance: C (Ohm/km) ion: Attenuation (dB/100m) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500 71.500	C (Ohm/km) Shield DC Resistance: C (Ohm/km) ion: Attenuation (dB/100m) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500 71.500 88.500	C (Ohm/km) Shield DC Resistance: C (Ohm/km) ion: Attenuation (dB/100m) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545 6.103		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500 71.500	C (Ohm/km) Shield DC Resistance: C (Ohm/km) ion: Attenuation (dB/100m) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500 71.500 88.500 100.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) ion: Attenuation (dB/100m) 0.787 1.444 1.706 1.870 2.001 2.030 2.559 3.543 5.414 5.545 6.103 6.398		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500 71.500 88.500 100.000 135.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) ion: Attenuation (dB/100m) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545 6.103 6.398 7.349		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 67.500 67.500 67.500 67.500 71.500 88.500 100.000 135.000 143.000 180.000 270.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545 6.103 6.398 7.349 7.546		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500 67.500 10.000 135.000 135.000 143.000 143.000 270.000 360.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545 6.103 6.398 7.349 7.546 8.432 10.401 12.107		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 67.500 67.500 71.500 88.500 100.000 135.000 143.000 135.000 143.000 270.000 360.000 540.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545 6.103 6.398 7.349 7.546 8.432 10.401 12.107 15.093		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 67.500 71.500 88.500 100.000 135.000 135.000 143.000 135.000 143.000 270.000 360.000 540.000 720.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545 6.103 6.398 7.349 7.546 8.432 10.401 12.107 15.093 17.652		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 67.500 71.500 88.500 100.000 135.000 135.000 143.000 135.000 143.000 270.000 360.000 540.000 750.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545 6.103 6.398 7.349 7.546 8.432 10.401 12.107 15.093 17.652 18.046		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MH2) 1.000 3.580 5.000 6.000 7.000 12.000 12.000 67.500 71.500 88.500 100.000 135.000 143.000 143.000 143.000 143.000 270.000 360.000 540.000 750.000 1000.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545 6.103 6.398 7.349 7.546 8.432 10.401 12.107 15.093 17.652 18.046 21.064		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 12.000 12.000 67.500 71.500 88.500 100.000 135.000 135.000 143.000 135.000 143.000 270.000 360.000 540.000 750.000 1000.000 1500.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545 6.103 6.398 7.349 7.546 8.432 10.401 12.107 15.093 17.652 18.046 21.064 26.215		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 125.000 67.500 71.500 88.500 100.000 135.000 135.000 143.000 135.000 270.000 360.000 540.000 720.000 750.000 1500.000 2000.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545 6.103 6.398 7.349 7.546 8.432 10.401 12.107 15.093 17.652 18.046 21.064 26.215 30.743		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500 71.500 88.500 100.000 135.000 143.000 143.000 143.000 270.000 360.000 540.000 720.000 750.000 1500.000 2250.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545 6.103 6.398 7.349 7.546 8.432 10.401 12.107 15.093 17.652 18.046 21.064 26.215 30.743 32.843		
m. Conducto DCR @ 20°C 20.9984 minal Outer DCR @ 20°C 9.1868 m. Attenuati Freq. (MHz) 1.000 3.580 5.000 6.000 7.000 10.000 12.000 125.000 67.500 71.500 88.500 100.000 135.000 135.000 143.000 135.000 270.000 360.000 540.000 720.000 750.000 1500.000 2000.000	C (Ohm/km) Shield DC Resistance: C (Ohm/km) 0.787 1.444 1.706 1.870 2.001 2.330 2.559 3.543 5.414 5.545 6.103 6.398 7.349 7.546 8.432 10.401 12.107 15.093 17.652 18.046 21.064 26.215 30.743		

Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

1694A Coax - Low Loss Serial Digital Coax

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 +/- 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.

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5.000	1600.000	23.000
1600.000	4500.000	21.000

Sweep Test

Sweep Testing:

100% Sweep tested 5 MHz to 4.5 GHz.

Misc. Information (Overall)

Notes (Overall)

Notes: Also available in bundled versions. See 7710A through 7713A.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1694A N3UN1000	1,000 FT	45.000 LB	GREEN, MIL		#18 PE/GIFHDPE SH FR PVC
1694A N3U1000	1,000 FT	45.000 LB	GREEN, MIL	С	#18 PE/GIFHDPE SH FR PVC
1694A N3U5000	5,000 FT	225.000 LB	GREEN, MIL	CN	#18 PE/GIFHDPE SH FR PVC
1694A 0011000	1,000 FT	45.000 LB	BROWN	С	#18 PE/GIFHDPE SH FR PVC
1694A 0015000	5,000 FT	225.000 LB	BROWN	CN	#18 PE/GIFHDPE SH FR PVC
1694A 0021000	1,000 FT	45.000 LB	RED	С	#18 PE/GIFHDPE SH FR PVC
1694A 0025000	5,000 FT	225.000 LB	RED	CN	#18 PE/GIFHDPE SH FR PVC
1694A 0031000	1,000 FT	45.000 LB	ORANGE	С	#18 PE/GIFHDPE SH FR PVC
1694A 004N1000	1,000 FT	45.000 LB	YELLOW		#18 PE/GIFHDPE SH FR PVC
1694A 0041000	1,000 FT	45.000 LB	YELLOW	С	#18 PE/GIFHDPE SH FR PVC
1694A 0061000	1,000 FT	45.000 LB	BLUE, LIGHT	С	#18 PE/GIFHDPE SH FR PVC
1694A 0065000	5,000 FT	225.000 LB	BLUE, LIGHT	CN	#18 PE/GIFHDPE SH FR PVC
1694A 0071000	1,000 FT	45.000 LB	VIOLET	С	#18 PE/GIFHDPE SH FR PVC
1694A 0075000	5,000 FT	225.000 LB	VIOLET	CN	#18 PE/GIFHDPE SH FR PVC
1694A 0081000	1,000 FT	45.000 LB	GRAY	С	#18 PE/GIFHDPE SH FR PVC
1694A 0085000	5,000 FT	225.000 LB	GRAY	CN	#18 PE/GIFHDPE SH FR PVC
1694A 009N1000	1,000 FT	45.000 LB	WHITE		#18 PE/GIFHDPE SH FR PVC
1694A 0091000	1,000 FT	45.000 LB	WHITE	С	#18 PE/GIFHDPE SH FR PVC
1694A 010N1000	1,000 FT	45.000 LB	BLACK		#18 PE/GIFHDPE SH FR PVC
1694A 0101000	1,000 FT	45.000 LB	BLACK	С	#18 PE/GIFHDPE SH FR PVC
1694A 010500	500 FT	22.500 LB	BLACK	С	#18 PE/GIFHDPE SH FR PVC
1694A 0105000	5,000 FT	225.000 LB	BLACK	CN	#18 PE/GIFHDPE SH FR PVC

Notes:

C = CRATE REEL PUT-UP.

N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

Revision Date: 03-11-2015 Revision Number: 14

© 2015 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 or materials listed as reportable or restricted within the Product Disclosure, is not 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 general guide for the safe handling, storage, and any other operation of the 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.