Detailed Specifications & Technical Data

ENGLISH 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.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	18	Solid	BC - Bare Copper	.040

Total Number of Conductors:

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.180

Outer Shield

Outer Shield Material:

Layer # Outer Shield Trade Name		Type	Outer Shield Material Covera		
	1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
	2		Braid	TC - Tinned Copper	95

Outer Jacket

Outer Jacket Material:

Outer Jacket Material PVC - Polyvinyl Chloride

NEC//III \ Consolfication

Overall Cable

Overall Nominal Diameter: 0.274 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +75°C		
Bulk Cable Weight:	41 lbs/1000 ft.		
Max. Recommended Pulling Tension:	69 lbs.		
Min. Bend Radius/Minor Axis:	2.750 in.		

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
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
RG Type:	6/U

Flame Test

UL Flame Test: UL1666 Vertical Shaft

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	CSA Flame Test:	FT4		
Sui	Suitability			
	Suitability - Indoor:	Yes		
	Suitability - Outdoor:	Yes - Black only.		
	Suitability - Aerial:	Yes - Black only, when supported by messenger wire.		
	Suitability - Burial:	No		
Plenum/Non-Plenum				
	Plenum (Y/N):	No		
	Plenum Number:	1695A		

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:



Nom. Inductance:

Inductance (µH/ft) 0.106

Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:

VP (%) 82

Nominal Delay:

Delay (ns/ft) 1.24

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 6.4

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 2.8

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)			
1.000	0.240			
3.580	0.440			
5.000	0.520			
6.000	0.570			
7.000	0.610			
10.000	0.710			
12.000	0.780			
25.000	1.080			
67.500	1.650			
71.500	1.690			
88.500	1.860			
100.000	1.950			
135.000	2.240			
143.000	2.300			
180.000	2.570			
270.000	3.170			
360.000	3.690			
540.000	4.600			
720.000	5.380			
750.000	5.500			
1000.000	6.420			
1500.000	7.990			
2000.000	9.370			
2250.000	10.010			
3000.000	11.780			
4500.000	14.920			

Max. Operating Voltage - UL:

Voltage

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1694A Coax - Low Loss Serial Digital Coax

300 V RMS

Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge Other Electrical Characteristic 1:

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) 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.

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11-05-2015