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.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	18	Solid	BC - Bare Copper	1.016

Total Number of Conductors:

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	4.572

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
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: 6.960 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +75°C		
Bulk Cable Weight:	61.016 Kg/Km		
Max. Recommended Pulling Tension:	306.926 N		
Min. Bend Radius/Minor Axis:	69.850 mm		

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	tability	
	Suitability - Indoor:	Yes
	Suitability - Outdoor:	Yes - Black only.
	Suitability - Aerial:	Yes - Black only, when supported by messenger wire.
	Suitability - Burial:	No
Ple	num/Non-Plenum	
	Plenum (Y/N):	No
	Plenum Number:	1695A

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



Nominal Delay:

Delay (ns/m) 4.06844

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 20.9984

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 9.1868

Nom. Attenuation:

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
7.546
8.432
10.401
12.107
15.093
17.652
18.046
21.064
26.215
30.743
32.843
38.650
48.953

Max. Operating Voltage - UL:

Voltage

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300 V RMS

Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge and termination. 75 \pm 1.5 Ohms Other Electrical Characteristic 1:

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.

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