

## 1694A Coax - Low Loss Serial Digital Coax

For more Information  
please call

1-800-Belden1

**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

**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

**Overall Cable**

Overall Nominal Diameter: 6.960 mm

**Mechanical Characteristics (Overall)**

Operating Temperature Range:	-30°C To +75°C
UL Temperature Rating:	75°C
Bulk Cable Weight:	61.016 Kg/Km
Max. Recommended Pulling Tension:	306.926 N
Min. Bend Radius (Install)/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 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

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EU Directive 2003/11/EC (BFR):	Yes
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CA Prop 65 (CJ for Wire & Cable):	Yes
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MII Order #39 (China RoHS):	Yes
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RG Type:	6/U
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**Flame Test**

UL Flame Test:	UL1666 Vertical Shaft
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**Suitability**

Suitability - Indoor:	Yes
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Suitability - Outdoor:	Yes - Black only
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Suitability - Aerial:	Yes - Black only, when supported by a messenger wire
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**Plenum/Non-Plenum**

Plenum (Y/N):	No
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Plenum Number:	1695A
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**Electrical Characteristics (Overall)****Nom. Characteristic Impedance:**

Impedance (Ohm)
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75
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**Nom. Inductance:**

Inductance (μH/m)
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0.347786
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**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/m)
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53.1522
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**Nominal Velocity of Propagation:**

VP (%)
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82
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**Nominal Delay:**

Delay (ns/m)
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4.06844
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**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/km)
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20.9984
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**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/km)
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9.1868
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**Nom. Attenuation:**

Freq. (MHz)	Attenuation (dB/100m)
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1.000	0.787
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3.580	1.444
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5.000	1.706
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6.000	1.870
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7.000	2.001
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10.000	2.330
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12.000	2.559
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25.000	3.543
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67.500	5.414
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71.500	5.545
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88.500	6.103
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100.000	6.398
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135.000	7.349
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143.000	7.546
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## METRIC MEASUREMENT VERSION

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180.000	8.432
270.000	10.401
360.000	12.107
540.000	15.093
720.000	17.652
750.000	18.046
1000.000	21.064
1500.000	26.215
2000.000	30.743
2250.000	32.843
3000.000	38.650
4500.000	48.953

## Max. Operating Voltage - UL:

Voltage
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	1600	23
1600	4500	21

## 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 N3U1000	305 MT	20.412 KG	GREEN, MIL	C	#18 PE/GIFHDPE SH FR PVC
1694A N3U5000	1,524 MT	102.059 KG	GREEN, MIL	C N	#18 PE/GIFHDPE SH FR PVC
1694A 0011000	305 MT	20.412 KG	BROWN	C	#18 PE/GIFHDPE SH FR PVC
1694A 0015000	1,524 MT	102.059 KG	BROWN	C N	#18 PE/GIFHDPE SH FR PVC
1694A 0021000	305 MT	20.412 KG	RED	C	#18 PE/GIFHDPE SH FR PVC
1694A 0025000	1,524 MT	102.059 KG	RED	C N	#18 PE/GIFHDPE SH FR PVC
1694A 0031000	305 MT	20.412 KG	ORANGE	C	#18 PE/GIFHDPE SH FR PVC
1694A 0041000	305 MT	20.412 KG	YELLOW	C	#18 PE/GIFHDPE SH FR PVC
1694A 0061000	305 MT	20.412 KG	BLUE, LIGHT	C	#18 PE/GIFHDPE SH FR PVC
1694A 0065000	1,524 MT	102.059 KG	BLUE, LIGHT	C N	#18 PE/GIFHDPE SH FR PVC
1694A 0071000	305 MT	20.412 KG	VIOLET	C	#18 PE/GIFHDPE SH FR PVC
1694A 0075000	1,524 MT	102.059 KG	VIOLET	C N	#18 PE/GIFHDPE SH FR PVC
1694A 0081000	305 MT	20.412 KG	GRAY	C	#18 PE/GIFHDPE SH FR PVC
1694A 0085000	1,524 MT	102.059 KG	GRAY	C N	#18 PE/GIFHDPE SH FR PVC
1694A 0091000	305 MT	20.412 KG	WHITE	C	#18 PE/GIFHDPE SH FR PVC
1694A 0101000	305 MT	20.412 KG	BLACK	C	#18 PE/GIFHDPE SH FR PVC
1694A 0105000	152 MT	10.206 KG	BLACK	C	#18 PE/GIFHDPE SH FR PVC
1694A 0105000	1,524 MT	102.059 KG	BLACK	C N	#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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