



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 Cabling

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

## 1694A Coax - Low Loss Serial Digital Coax

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

### Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes - Black only

Suitability - Aerial: Yes - Black only, when supported by a messenger wire

### Plenum/Non-Plenum

Plenum (Y/N): No

Plenum Number: 1695A

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

75

### Nom. Inductance:

Inductance (µH/m)

0.347786

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

53.1522

### Nominal Velocity of Propagation:

VP (%)

82

### 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:

Freq. (MHz) Attenuation (dB/100m)

1.000 0.787

3.580 1.444

5.000 1.706

6.000 1.870

7.000 2.001

10.000 2.330

12.000 2.559

25.000 3.543

67.500 5.414

71.500 5.545

88.500 6.103

100.000 6.398

135.000 7.349

143.000 7.546

METRIC MEASUREMENT VERSION

## 1694A Coax - Low Loss Serial Digital Coax

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 010500	152 MT	9.299 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.

Revision Number: 13    Revision Date: 02-22-2010

© 2010 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.