

4694R Coax - 4K Ultra-High-Definition Coax Cable for 12G-SDI



For more Information
please call

1-800-Belden1

**General Description:**

12 GHz, 4K UHD Precision Video Coax, RG-6/U Type, 75 Ohm, 18 AWG solid .040" silver plated copper conductor, gas-injected foam HDPE insulation, Duofoil® bonded to core + tinned copper braid shield (95% coverage), PVC jacket.

Usage (Overall)

Suitable Applications:

SMPTE 2082-1 12 Gb/s UHDTV, SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080p

Physical Characteristics (Overall)**Conductor**

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	18	Solid	SPC - Silver Plated Copper	0.040

Total Number of Conductors:

1

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	Coverage (%)
1	Bonded Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100.000
2		Braid	TC - Tinned Copper	95.000

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

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
MIL Order #39 (China RoHS):	Yes

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RG Type:	6/U
Flame Test	
UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4
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

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (µH/ft)
0.106

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
15.900

Nominal Velocity of Propagation:

VP (%)
84.500

Nominal Delay:

Delay (ns/ft)
1.200

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
6.4

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
2.800

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1.000	0.230
3.580	0.440
5.000	0.510
6.000	0.560
7.000	0.590
10.000	0.700
12.000	0.750
25.000	1.040
67.500	1.580
71.500	1.620
88.500	1.780
100.000	1.890
135.000	2.100
143.000	2.160
180.000	2.440
270.000	2.970
360.000	3.450
540.000	4.300
720.000	5.000
750.000	5.100
1000.000	5.900
1500.000	7.300
2000.000	8.500
2250.000	9.100
3000.000	10.600

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4500.000	13.200
6000.000	15.500
12000.000	23.000

Max. Operating Voltage - UL:

Voltage
300 V RMS

Other Electrical Characteristic 1:

Return Loss: 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
4500.000	12000.000	15.000

Sweep Test

Sweep Testing:

Sweep tested 5 MHz to 12 GHz.

Notes (Overall)

Notes: Print legend includes sequential footage marks.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
4694R N3U1000	1,000 FT	44.000 LB	GREEN, MIL		#18 PE/GIFHDLDP SH FRPVC
4694R 0021000	1,000 FT	44.000 LB	RED		#18 PE/GIFHDLDP SH FRPVC
4694R 0031000	1,000 FT	44.000 LB	ORANGE		#18 PE/GIFHDLDP SH FRPVC
4694R 0041000	1,000 FT	44.000 LB	YELLOW		#18 PE/GIFHDLDP SH FRPVC
4694R 0061000	1,000 FT	44.000 LB	BLUE, LIGHT		#18 PE/GIFHDLDP SH FRPVC
4694R 0071000	1,000 FT	44.000 LB	VIOLET		#18 PE/GIFHDLDP SH FRPVC
4694R 0101000	1,000 FT	44.000 LB	BLACK		#18 PE/GIFHDLDP SH FRPVC
4694R 0105000	5,000 FT	210.000 LB	BLACK		#18 PE/GIFHDLDP SH FRPVC

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