Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



4694P 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, Plenum-CMP, 75 Ohm RG6 18 AWG solid silver plated copper conductor, foam FEP core, Duofoil® bonded to core+95% tinned copper braid, Flamarrest® 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:

Insulation

Insulation Material:

Insulation Trade Nam	e Insulation Material	Dia. (in.)
Teflon®	FFEP - Foam Fluorinated Ethylene Propylene	.170

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)	Description
1	Bonded Duofoil®	Таре	Aluminum Foil-Polyester Tape-Aluminum Foil	100.000	Bonded to Insulation
2		Braid	TC - Tinned Copper	95.000	

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material			
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride			

Overall Cable

Overall Nominal Diameter:

0.229 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +75°C
Bulk Cable Weight:	41 lbs/1000 ft.
Max. Recommended Pulling Tension:	69 lbs.
Min. Bend Radius/Minor Axis:	2.300 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	No
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	08/16/2017
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

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	RG Type:	6/U		
Fla	me Test			
	UL Flame Test:	NFPA 262		
	CSA Flame Test:	FT6		
Sui	Suitability			
	Suitability - Indoor:	Yes		
Ple	num/Non-Plenum			
	Plenum (Y/N):	Yes		
	Non-Plenum Number:	4694R		

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:

VP (%) 83.000

Nominal Delay:



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 6.300

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 2.900

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1.000	0.230
3.580	0.460
5.000	0.540
6.000	0.580
7.000	0.630
10.000	0.730
12.000	0.800
25.000	1.110
55.000	1.570
67.500	1.730
71.500	1.770
88.500	1.920
100.000	2.070
135.000	2.390
143.000	2.460
180.000	2.760
270.000	3.420
360.000	4.020
540.000	5.080
720.000	6.010
750.000	6.150
1000.000	7.290
1500.000	9.270
2000.000	11.020
2250.000	11.840
3000.000	14.120
4500.000	18.190
6000.000	21.530
12000.000	33.020

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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: Sween tested 5 MHz to 12 GHz

Notes (Overall)

Notes: Teflon® is a registered trademark of Chemours and Co. used under license by Belden, Inc. Print legend includes seguential footage marks. Print legend includes

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
4694P N3U1000	1,000 FT	38.000 LB	GREEN, MIL	С	#18 FFEP SH FLRST
4694P 0021000	1,000 FT	38.000 LB	RED	С	#18 FFEP SH FLRST
4694P 0031000	1,000 FT	38.000 LB	ORANGE	С	#18 FFEP SH FLRST
4694P 0061000	1,000 FT	38.000 LB	BLUE, LIGHT	С	#18 FFEP SH FLRST
4694P 0071000	1,000 FT	38.000 LB	VIOLET	С	#18 FFEP SH FLRST
4694P 0101000	1,000 FT	38.000 LB	BLACK	С	#18 FFEP SH FLRST
4694P 0105000	5,000 FT	190.000 LB	BLACK	С	#18 FFEP SH FLRST

Notes: C = CRATE REEL PUT-UP.

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