



Part Number: 4694P

12 GHz Coax, 4K UHD Precision Video Coax, RG-6/U Type, 75 Ohm, 18 AWG Solid, CMP

Product Description

12 GHz, 4K UHD Precision Video Coax, 75 Ohm RG6 18 AWG solid silver plated copper conductor, foam FEP core, Duofoil® bonded to core+95% tinned copper braid, CMP, Flammarrest® jacket

Technical Specifications

Product Overview

Environmental Space:	Indoor (Not Riser or Plenum)
Suitable Applications:	SMPTE 2082-1 12 Gb/s UHD TV, SMPTE 2081-1 6 Gb/s UHD TV, SMPTE 424M 3 Gb/s HD-SDI 1080P

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
18	Solid	SPC - Silver Plated Copper	0.04	1

Conductor Size:	18 AWG
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Insulation

Material	Nominal Diameter
FFEP - Foam Fluorinated Ethylene Propylene	0.168 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Bonded Duofoil® (Bonded to Dielectric)	100 %
Braid	2	TC - Tinned Copper		95 %

Outer Jacket Material

Material	Nominal Diameter
LS PVC - Low Smoke Polyvinyl Chloride	0.229 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Outer Conductor DCR
6.3 Ohm/1000ft	2.9 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
16.1 pF/ft

Inductance

Nominal Inductance
0.103 µH/ft

Impedance

Nominal Characteristic Impedance
75 Ohm

Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5 MHz - 1600 MHz	23 dB
1600 MHz - 4500 MHz	21 dB
4500 MHz - 12000 MHz	15 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.23 dB/100ft
3.58 MHz	0.46 dB/100ft
5 MHz	0.54 dB/100ft
6 MHz	0.58 dB/100ft
7 MHz	0.63 dB/100ft
10 MHz	0.73 dB/100ft
12 MHz	0.80 dB/100ft
25 MHz	1.11 dB/100ft
55 MHz	1.57 dB/100ft
67.5 MHz	1.73 dB/100ft
71.5 MHz	1.77 dB/100ft
88.5 MHz	1.92 dB/100ft
100 MHz	2.07 dB/100ft
135 MHz	2.39 dB/100ft
143 MHz	2.46 dB/100ft
180 MHz	2.76 dB/100ft
270 MHz	3.42 dB/100ft
360 MHz	4.02 dB/100ft
540 MHz	5.08 dB/100ft
720 MHz	6.01 dB/100ft
750 MHz	6.15 dB/100ft
1000 MHz	7.29 dB/100ft
1500 MHz	9.27 dB/100ft
2000 MHz	11.02 dB/100ft
2250 MHz	11.84 dB/100ft
3000 MHz	14.12 dB/100ft
4500 MHz	18.19 dB/100ft
6000 MHz	21.53 dB/100ft
12000 MHz	33.02 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.22 ns/ft	83 %

Voltage**UL Voltage Rating**

300 V

Electrical Characteristics Notes: Return Loss: Fixed bridge and termination

Temperature Range

Operating Temp Range:	-20°C To +75°C
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Mechanical Characteristics

Bulk Cable Weight:	41 lbs/1000ft
Max Recommended Pulling Tension:	69 lbs
Min Bend Radius/Minor Axis:	2.3 in

Standards

NEC/(UL) Specification:	CMP
RG Type:	6/U Type

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
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EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	Yes
EU CE Mark:	No
EU RoHS Compliance Date (yyyy-mm-dd):	2017-08-16
CA Prop 65 (CJ for Wire & Cable):	Yes

Suitability

Suitability - Indoor:	Yes
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Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Y
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Part Number

Non-Plenum Number:	4694R
Related Parts:	4694R

Variants

Item #	Color
4694P 0101000	Black
4694P 0105000	Black
4694P 0061000	Blue, Light
4694P N3U1000	Green, Mil
4694P 0031000	Orange
4694P 0021000	Red
4694P 0071000	Violet

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