



Product: [4694F](#)

12 GHz Coax, 4K UHD Precision Flexible Video Coax, RG-6/U Type, 75 Ohm, 18 AWG solid, CM

Product Description

12 GHz Coax, 4K UHD Precision Flexible Video Cable, RG-6/U Type, 75 Ohm, 18 AWG solid .040" silver plated copper conductor, gas-injected foam HDPE insulation, dual tinned copper braid shield (95% coverage each), CM, PVC jacket.

Technical Specifications

Product Overview

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
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
18	Solid	SC - Silvered Copper	0.040 in	1

Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.180 in

Table Notes:	Gas Injected
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Outer Shield Material

Type	Material	Coverage [%]
Braid	Tinned Copper (TC)	95%
Braid	Tinned Copper (TC)	95%

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.276 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Outer Conductor DCR
6.4 Ohm/1000ft	1.5 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
15.9 pF/ft

Inductance

Nominal Inductance
0.106 μ H/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	0.19 dB/100ft
3.58 MHz	0.37 dB/100ft
5 MHz	0.45 dB/100ft
6 MHz	0.49 dB/100ft
7 MHz	0.53 dB/100ft
10 MHz	0.63 dB/100ft
12 MHz	0.69 dB/100ft
25 MHz	1.01 dB/100ft
55 MHz	1.52 dB/100ft
67.5 MHz	1.70 dB/100ft
71.5 MHz	1.75 dB/100ft
88.5 MHz	1.96 dB/100ft
100 MHz	2.09 dB/100ft
135 MHz	2.45 dB/100ft
143 MHz	2.52 dB/100ft
180 MHz	2.86 dB/100ft
270 MHz	3.56 dB/100ft
360 MHz	4.17 dB/100ft
540 MHz	5.25 dB/100ft
720 MHz	6.18 dB/100ft
750 MHz	6.32 dB/100ft
1000 MHz	7.44 dB/100ft
1500 MHz	9.39 dB/100ft
2000 MHz	11.09 dB/100ft
2250 MHz	11.87 dB/100ft
3000 MHz	14.09 dB/100ft
4500 MHz	18.04 dB/100ft
6000 MHz	21.71 dB/100ft
12000 MHz	40.53 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.20 ns/ft	85%

Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes: Return Loss: Fixed bridge and termination

Temperature Range

Operating Temp Range:	-30°C To +75°C
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Mechanical Characteristics

Bulk Cable Weight:	49 lbs/1000ft
Max. Pull Tension:	80 lbs
Min. Bend Radius/Minor Axis:	2.75 in

Standards

NEC/(UL) Compliance:	CM
CEC/C(UL) Compliance:	CM
RG Type:	6

Applicable Environmental and Other Programs

Environmental Space:	Indoor
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)

Suitability

Suitability - Indoor:	Yes
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Flammability, LSOH, Toxicity Testing

UL Flammability:	UL 1685 UL Loading
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Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Put-Up Type	Length	UPC
4694F B591000	Black, Matte	Reel	1,000 ft	612825424895
4694F B595000	Black, Matte	Reel	5,000 ft	612825424970
4694F G7X1000	Blue, Matte	Reel	1,000 ft	612825424925
4694F G7W1000	Green, Matte	Reel	1,000 ft	612825424918
4694F G8L1000	Orange, Matte	Reel	1,000 ft	612825424949
4694F G7V1000	Red, Matte	Reel	1,000 ft	612825424901
4694F Z4B1000	Violet	Reel	1,000 ft	612825424963
4694F G7Y1000	White, Matte	Reel	1,000 ft	612825424932
4694F G8M1000	Yellow, Matte	Reel	1,000 ft	612825424956

Product Notes

Notes:	Print legend includes sequential footage marks.
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History

Update and Revision:	Revision Number: 0.104 Revision Date: 09-10-2021
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