



Part Number: 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, Duofoil® bonded to core + tinned copper braid shield (95% coverage), CM, PVC jacket.

Technical Specifications

Product Overview

Environmental Space:	Indoor
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	0.040 in	1

Conductor Size:	18 AWG
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Insulation

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.180 in

Outer Shield Material

Type	Material	Coverage [%]
Braid	TC - Tinned Copper	95.0 %
Braid	TC - Tinned Copper	95.0 %

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 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	0.19 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	84.5 %

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 Recommended Pulling Tension:	80 lbs
Min Bend Radius/Minor Axis:	2.75 in

Standards

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

Applicable Environmental and Other Programs

EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU RoHS Compliance Date (yyyy-mm-dd):	2018-08-30
CA Prop 65 (CJ for Wire & Cable):	Yes

Suitability

Suitability - Indoor:	Yes
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Flammability, LS0H, 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
4694F B591000	Black, Matte
4694F B595000	Black, Matte
4694F G7X1000	Blue, Matte
4694F G7W1000	Green, Matte
4694F G8L1000	Orange, Matte
4694F G7V1000	Red, Matte
4694F Z4B1000	Violet
4694F G7Y1000	White, Matte
4694F G8M1000	Yellow, Matte

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