



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 UHDTV, SMPTE 2081-1 6 Gb/s UHDTV, 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: 1		AWG		

#### 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**

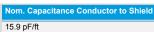
Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.276 in

#### **Electrical Characteristics**

#### Conductor DCR

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

## Capacitance



#### 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)

High Frequency (Nominal/Typical)			
	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	

# **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

Suitability Indoor:	Voc
Suitability	
CA Prop 65 (CJ for Wire & Cable):	Yes

# Flammability, LS0H, Toxicity Testing

UL Flammability: UL 1685 UL Loading

# Plenum/Non-Plenum

Plenum (Y/N): No

#### **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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