

# Part Number: 4694ANH

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

# **Product Description**

12 GHz Coax, 4K UHD Precision 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), LSZH jacket.

# **Technical Specifications**

## **Product Overview**

Environmental Space:	Indoor - Euroclass Cca
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

Insulation

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

#### **Outer Shield Material**

Т	ype	Layer	Material	Material Trade Name	Coverage [%]
Т	ape	1	Aluminum/Polyester/Aluminum	Bonded Duofoil® (Bonded to Dielectric)	100.0 %
В	Braid	2	TC - Tinned Copper		95.0 %

#### **Outer Jacket Material**

Material	Nominal Diameter
LSZH - Low Smoke Halogen Free	0.274 in

#### **Electrical Characteristics**

#### Conductor DCR

Nominal Conductor DCR	Outer Conductor DCR
6.4 Ohm/1000ft	2.8 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 MHz	0.23 dB/100ft
3.58 MHz MHz	0.44 dB/100ft
5 MHz MHz	0.51 dB/100ft
6 MHz MHz	0.56 dB/100ft
7 MHz MHz	0.59 dB/100ft
10 MHz MHz	0.70 dB/100ft
12 MHz MHz	0.75 dB/100ft
25 MHz MHz	1.04 dB/100ft
55 MHz MHz	1.45 dB/100ft
67.5 MHz MHz	1.58 dB/100ft
71.5 MHz MHz	1.62 dB/100ft
88.5 MHz MHz	1.78 dB/100ft
100 MHz MHz	1.89 dB/100ft
135 MHz	2.10 dB/100ft
143 MHz	2.16 dB/100ft
180 MHz	2.44 dB/100ft
270 MHz	2.97 dB/100ft
360 MHz	3.45 dB/100ft
540 MHz	4.30 dB/100ft
720 MHz	5.00 dB/100ft
750 MHz	5.10 dB/100ft
1000 MHz	5.90 dB/100ft
1500 MHz	7.30 dB/100ft
2000 MHz	8.50 dB/100ft
2250 MHz	9.10 dB/100ft
3000 MHz	10.6 dB/100ft
4500 MHz	13.2 dB/100ft
6000 MHz	15.5 dB/100ft
12000 MHz	23.0 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 Rang	le	

Operating Temp Range:	-30°C To +75°C

# **Mechanical Characteristics**

UV Resistance:	Yes
Bulk Cable Weight:	41 lbs/1000ft
Max Recommended Pulling Tension:	69 lbs
Min Bend Radius/Minor Axis:	2.75 in

# Standards

NEC/(UL) Specification:	CMG-LS
CEC/C(UL) Specification:	CMG-LS
CPR Euroclass:	Cca-s1,d1,a1
RG Type:	6/U Type

## **Applicable Environmental and Other Programs**

EU Directive 2000/53/EC (ELV):	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:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes

## **Suitability**

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

# Flammability, LS0H, Toxicity Testing

C(UL) Flammability:	FT4
CSA Flammability:	FT4
ISO/IEC Flammability:	IEC 60332-1-2

#### **Plenum/Non-Plenum**

Plenum (Y/N):	No
Plenum Number:	4694P

#### **Part Number**

Non.	Planum	Number:

#### Variants

item #	Color	UPC	Length
4694ANH G751000	Aqua	612825437369	1,000 ft
4694ANH G751640	Aqua	612825437208	1,640 ft
4694ANH G753280	Aqua	612825437253	3,280 ft
4694ANH 0101000	Black	612825437185	1,000 ft
4694ANH 0101640	Black	612825437246	1,640 ft
4694ANH 0103280	Black	612825437291	3,280 ft
4694ANH 0061000	Blue, Light	612825437178	1,000 ft
4694ANH 0061640	Blue, Light	612825437222	1,640 ft
4694ANH 0063280	Blue, Light	612825437277	3,280 ft
4694ANH N3U1000	Mil Green	612825437161	1,000 ft
4694ANH N3U1640	Mil Green	612825437215	1,640 ft
4694ANH N3U3280	Mil Green	612825437260	3,280 ft
4694ANH 0071000	Purple	612825437192	1,000 ft
4694ANH 0071640	Purple	612825437239	1,640 ft
4694ANH 0073280	Purple	612825437284	3,280 ft

4694R

#### **Product Notes**

Notes:

Print legend includes sequential footage marks.

#### **History**

Update and Revision:

Revision Number: 0.14 Revision Date: 08-22-2019

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