



**Product:** [4794P](#)

4K UHD Coax for 12G-SDI, 75 Ohm, Series 7, 16 AWG Solid SC, Tri-Shield, PVDF Jkt, CMP

### Product Description

75 Ohm SDI Coax, Series 7, 16 AWG Solid Silvered Copper Conductor, FEP Insulation, Foil + 95% Tinned Copper Braid + Foil Shield, PVDF Jacket, CMP

### Technical Specifications

#### Product Overview

Suitable Applications:	Ultra-High Definition Digital Video, 4K Single-link 12 Gb/s UHD TV, 4K D-Cinema, 8K Quad-link UHD TV, HD-SDI 1080p
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#### Physical Characteristics (Overall)

##### Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
16	Solid	SC - Silvered Copper	0.051 in	1

##### Insulation

Material	Nominal Diameter
FEP - Fluorinated Ethylene Propylene (Foam)	0.225 in

##### Outer Shield

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duobond® II	100%
Braid	2	Tinned Copper (TC)		95%
Tape	3	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%

##### Outer Jacket

Material	Nominal Diameter
PVDF - Polyvinylidene Fluoride	0.297 in

#### Electrical Characteristics

##### Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
4.0 Ohm/1000ft	2.0 Ohm/1000ft

##### Capacitance

Nom. Capacitance Conductor to Shield
16.4 pF/ft

##### Impedance

Nominal Characteristic Impedance
75 Ohm

##### Return Loss (RL)

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

## High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.20 dB/100ft
3.58 MHz	0.37 dB/100ft
5 MHz	0.43 dB/100ft
6 MHz	0.46 dB/100ft
7 MHz	0.48 dB/100ft
10 MHz	0.57 dB/100ft
12 MHz	0.61 dB/100ft
25 MHz	0.84 dB/100ft
55 MHz	1.23 dB/100ft
67.5 MHz	1.36 dB/100ft
71.5 MHz	1.39 dB/100ft
88.5 MHz	1.54 dB/100ft
100 MHz	1.63 dB/100ft
135 MHz	1.92 dB/100ft
143 MHz	1.98 dB/100ft
180 MHz	2.23 dB/100ft
270 MHz	2.79 dB/100ft
360 MHz	3.28 dB/100ft
540 MHz	4.18 dB/100ft
720 MHz	4.98 dB/100ft
750 MHz	5.11 dB/100ft
1000 MHz	6.08 dB/100ft
1500 MHz	7.83 dB/100ft
2000 MHz	9.41 dB/100ft
2250 MHz	10.13 dB/100ft
3000 MHz	12.2 dB/100ft
4500 MHz	15.84 dB/100ft
6000 MHz	19.04 dB/100ft
12000 MHz	30.44 dB/100ft

## Delay

Nominal Velocity of Propagation (VP) [%]
83%

## Voltage

UL Description	UL Voltage Rating
CMP	300 V

## Temperature Range

UL Temp Rating:	60°C
Operating Temperature Range:	0°C to +75°C

## Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	59 lbs/1000ft
Max. Pull Tension:	84 lbs
Min. Bend Radius During Installation:	3 in

## Standards

NEC/(UL) Compliance:	CMP
CEC/C(UL) Compliance:	CMP
Series Type:	7

## Applicable Environmental and Other Programs

Environmental Space:	Indoor - Plenum, Indoor/Outdoor
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes

EU CE Mark:	Yes
CA Prop 65:	Yes
MII Order #39 (China RoHS):	Yes

## Suitability

Suitability - Aerial:	Yes - When supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

## Flammability, LSOH, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6

## Related Part Numbers

Non-Plenum Number:	4794R
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## Variants

Item #	Color	Put-Up Type	Length
4794P 0101000	Black	Reel	1,000 ft
4794P 0102500	Black	Reel	2,500 ft
4794P 0061000	Blue	Reel	1,000 ft
4794P 0051000	Green, Dark	Reel	1,000 ft
4794P 0031000	Orange	Reel	1,000 ft
4794P 0071000	Violet	Reel	1,000 ft
4794P 0091000	White	Reel	1,000 ft
4794P 0041000	Yellow	Reel	1,000 ft

## History

Update and Revision:	Revision Number: 0.89 Revision Date: 04-29-2024
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