

**Part Number: 7788A**

**VideoFLEX® Snake, Sub-miniature, #23-4 Coax, CMR**



**Product Description**

Digital Coax Snake Cable, Riser-CMR, 4-Sub-miniature 23 AWG, solid bare copper conductors, foam HDPE core, Duofoil® +95% tinned copper braid, PVC jacket

**Technical Specifications**

**Product Overview**

Environmental Space:	Indoor/Outdoor
Suitable Applications:	SMPTE 2081-1 6 Gb/s UHD TV, SMPTE 424M 3 Gb/s HD-SDI 1080p, SDI/HDTV Digital Video, High Definition (HD), Standard Definition (SDI)

**Physical Characteristics (Overall)**

**Conductor**

AWG	Stranding	Material	Nominal Diameter	No. of Coax
23	Solid	BC - Bare Copper	0.023 in	4

Conductor Count:	4
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**Insulation**

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.102 in

**Color Chart**

Number	Color
1	Red
2	Green
3	Blue
4	White

**Inner Shield Material**

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum Foil-Polyester Tape-Aluminum Foil	Duofoil®	100 %
Braid	2	TC - Tinned Copper		95 %

**Inner Jacket Material**

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.159 in

**Outer Jacket Material**

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.481 in

**Electrical Characteristics**

**Conductor DCR**

Nominal Conductor DCR	Nominal Conductor DCR	Conductor Resistance	Nominal Inner Shield DCR	Outer Conductor DCR
20.1 Ohm/1000ft	20.1 Ohm/1000ft		7.6 Ohm/1000ft	7.6 Ohm/1000ft

## Capacitance

Nom. Capacitance Conductor to Shield
16.5 pF/ft

## Inductance

Nominal Inductance
0.106 $\mu$ H/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
4500-6000 MHz	15 dB

## High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.4 dB/100ft
3.6 MHz	0.8 dB/100ft
10 MHz	1.2 dB/100ft
71.5 MHz	3.1 dB/100ft
135 MHz	3.8 dB/100ft
270 MHz	5.4 dB/100ft
360 MHz	6.2 dB/100ft
540 MHz	7.7 dB/100ft
720 MHz	9.1 dB/100ft
750 MHz	9.5 dB/100ft
1000 MHz	10.5 dB/100ft
1500 MHz	13 dB/100ft
2500 MHz	16.9 dB/100ft
3000 MHz	18.5 dB/100ft
4500 MHz	24.6 dB/100ft
6000 MHz	28.97 dB/100ft

## Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.24 ns/ft	83 %

## Voltage

UL Voltage Rating
300 V RMS

## Temperature Range

Non-UL Temp Rating:	75°C
UL Temp Rating:	60°C
Operating Temp Range:	-35°C To +75°C

## Mechanical Characteristics

Bulk Cable Weight:	103 lbs/1000ft
Max Recommended Pulling Tension:	144 lbs
Min Bend Radius/Minor Axis:	5 in

## Standards

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
RG Type:	Mini 59/U Type
Series Type:	Sub-miniature 59

## Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	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
MII Order #39 (China RoHS):	Yes

## Suitability

Suitability - Burial:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

## Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft
CSA Flammability:	FT4
UL voltage rating:	300 V RMS

## Plenum/Non-Plenum

Plenum (Y/N):	No
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## Part Number

### Variants

Item #	Color	UPC	Length	Footnote
7788A B591000	Black, Matte	612825357957	1,000 ft	C

Footnote:	C - CRATE REEL PUT-UP.
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## History

Update and Revision:	Revision Number: 0.259 Revision Date: 08-22-2019
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