



Product: [7789A](#)



VideoFLEX® Snake, Sub-miniature, #23-5 Coax, CMR

Product Description

Digital Coax Snake Cable, Riser-CMR, 5-Sub-miniature 23 AWG, solid bare copper conductors, foam HDPE core, Duofoil® +95% tinned copper braid, PVC jacket

Technical Specifications

Product Overview

Suitable Applications:	SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080p, SDI/HDTV Digital Video, High Definition (HD), Standard Definition (SDI)
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Physical Characteristics (Overall)

Conductor				
AWG	Stranding	Material	Nominal Diameter	No. of Coax
23	Solid	BC - Bare Copper	0.023 in	5
Conductor Count:				5

Insulation	
Material	Nominal Diameter
PE - Polyethylene (Foam)	0.102 in
Table Notes:	
Gas Injected	

Color Chart	
Number	Color
1	Red
2	Green
3	Blue
4	White
5	Yellow

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

Inner Jacket	
Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.159 in

Outer Jacket	
Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.539 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 µH/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

Electrical Characteristics Notes:	TDR Impedance: 75 +/- 3 Ohms
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Temperature Range

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

Mechanical Characteristics

Bulk Cable Weight:	136 lbs/1000ft
Max. Pull Tension:	180 lbs
Min. Bend Radius/Minor Axis:	5.5 in

Standards

NEC/(UL) Compliance:	CMR
CEC/C(UL) Compliance:	CMG
CPR Euroclass:	Eca
RG Type:	Mini 59

Applicable Environmental and Other Programs

Environmental Space:	Indoor/Outdoor
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
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 Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	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
IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
7789A B59500	Black, Matte	Reel	500 ft	612825355410
7789A B591000	Black, Matte	Reel	1,000 ft	612825357940

Footnote:	C - CRATE REEL PUT-UP.
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History

Update and Revision:	Revision Number: 0.444 Revision Date: 04-29-2024
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