



# Product: VSD2001

Serial Digital Coax, RG6, 18 AWG Solid BC, Foil + Braid, CMR

# **Product Description**

Gepco a Belden Brand, SDI Coax, RG-6, 18 AWG solid bare copper conductor, gas-injected foam PE dielectric, aluminum foil shield plus 95% TC braid, CMR rated PVC jacket.

## **Technical Specifications**

#### **Product Overview**

Suitable Applications:	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	BC - Bare Copper	0.04 in	1

#### Insulation

Material	Nomina	l Diameter
PE - Polyethylene (Foam)	0.18 in	
Table Notes:		Gas Inject

## Outer Shield

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

### Outer Jacket

Material	Nominal Diameter	
PVC - Polyvinyl Chloride	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
16.2 pF/ft

#### Inductance

Nominal Inductanc 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	0.24 dB/100ft
3.58 MHz	0.44 dB/100ft
5 MHz	0.52 dB/100ft
6 MHz	0.57 dB/100ft
7 MHz	0.61 dB/100ft
10 MHz	0.71 dB/100ft
12 MHz	0.78 dB/100ft
25 MHz	1.08 dB/100ft
67.5 MHz	1.65 dB/100ft
71.5 MHz	1.69 dB/100ft
88.5 MHz	1.86 dB/100ft
100 MHz	1.95 dB/100ft
135 MHz	2.24 dB/100ft
143 MHz	2.3 dB/100ft
180 MHz	2.57 dB/100ft
270 MHz	3.17 dB/100ft
360 MHz	3.69 dB/100ft
540 MHz	4.5 dB/100ft
720 MHz	5.3 dB/100ft
750 MHz	5.4 dB/100ft
1000 MHz	6.3 dB/100ft
1500 MHz	7.8 dB/100ft
2000 MHz	9.2 dB/100ft
2250 MHz	9.8 dB/100ft
3000 MHz	11.5 dB/100ft
4500 MHz	14.5 dB/100ft
6000 MHz	17.7 dB/100ft

## Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.24 ns/ft	82%

## Voltage

UL Voltage Rating 300 V RMS		
Electrical Characteristic	s Notes:	Return Loss: Fixed bridge and termination

# **Temperature Range**

UL Temp Rating:	75°C
Operating Temperature Range:	-30°C To +75°C

## **Mechanical Characteristics**

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

# Standards

NEC/(UL) Compliance:	CMR
CEC/C(UL) Compliance:	CMG
RG Type:	6

# Applicable Environmental and Other Programs

Environmental Space:	Indoor/Outdoor
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	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

UL Flammability:	UL1666 Vertical Shaft
CSA Flammability:	FT4
IEC Flammability:	IEC 60332-1-2

# Plenum/Non-Plenum

Plenum (Y/N):	No

# **Related Part Numbers**

## Variants

ltem #	Color	Put-Up Type	Length	UPC
VSD2001-0.99	Black	Reel		612825393092
VSD2001-0.38	Black	Reel	500 ft	612825390176
VSD2001-0.41	Black	Reel	1,000 ft	612825390183
VSD2001-0.46	Black	Reel	5,000 ft	
VSD2001-6.99	Blue	Reel		612825393214
VSD2001-6.38	Blue	Reel	500 ft	612825390275
VSD2001-6.41	Blue	Reel	1,000 ft	612825390282
VSD2001-1.99	Brown	Reel		612825393160
VSD2001-1.38	Brown	Reel	500 ft	612825390190
VSD2001-1.41	Brown	Reel	1,000 ft	612825390152
VSD2001-8.99	Gray	Reel		612825393238
VSD2001-8.38	Gray	Reel	500 ft	612825390299
VSD2001-8.41	Gray	Reel	1,000 ft	612825390329
VSD2001-5.99	Green	Reel		612825393207
VSD2001-5.38	Green	Reel	500 ft	612825390251
VSD2001-5.41	Green	Reel	1,000 ft	612825390268
VSD2001-3.99	Orange	Reel		612825393184
VSD2001-3.38	Orange	Reel	500 ft	612825390213
VSD2001-3.41	Orange	Reel	1,000 ft	612825390220
VSD2001-2.99	Red	Reel		612825393177
VSD2001-2.38	Red	Reel	500 ft	612825390206
VSD2001-2.41	Red	Reel	1,000 ft	612825390169
VSD2001-7.99	Violet	Reel		612825393221
VSD2001-7.38	Violet	Reel	500 ft	612825390305
VSD2001-7.41	Violet	Reel	1,000 ft	612825390312
VSD2001-9.99	White	Reel		612825389262
VSD2001-9.38	White	Reel	500 ft	612825390336
VSD2001-9.41	White	Reel	1,000 ft	612825390343
VSD2001-4.99	Yellow	Reel		612825393191
VSD2001-4.38	Yellow	Reel	500 ft	612825390244
VSD2001-4.41	Yellow	Reel	1,000 ft	612825390237

# History

Update and Revision:

Revision Number: 0.54 Revision Date: 11-09-2022

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