



## Description:

Series 6, 18 AWG solid .040" bare copper or bare copper-covered steel conductor (see below), gas-injected foam polyethylene insulation, Duobond® II + aluminum braid shield (60% coverage), PVC jacket (black, gray, white or neutral).

## Physical Characteristics (Overall)

### Conductor

**AWG:**

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	18	Solid	BCCS - Bare Copper Covered Steel	.040

### Insulation

**Insulation Material:**

Insulation Material	Dia. (in.)
Gas-injected FPE - Foam Polyethylene	.180

### Outer Shield

**Outer Shield Material:**

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	AL - Aluminum	60

### Outer Jacket

**Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

### Overall Cabling

**Overall Nominal Diameter:** 0.270 in.

## Mechanical Characteristics (Overall)

**Installation Temperature Range:** -30°C To +80°C

**Operating Temperature Range:** -40°C To +80°C

**Bulk Cable Weight:** 30 lbs/1000 ft.

**Max. Recommended Pulling Tension:** 126 lbs.

**Min. Bend Radius (Install)/Minor Axis:** 2 in.

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

**NEC/(UL) Specification:** CATV, CM

**CEC/C(UL) Specification:** CM

**EU CE Mark:** No

**EU Directive 2000/53/EC (ELV):** Yes

**EU Directive 2002/95/EC (RoHS):** Yes

**EU RoHS Compliance Date (mm/dd/yyyy):** 01/01/2004

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

MIL Order #39 (China RoHS): Yes

Series Type: Series 6

### Flame Test

UL Flame Test: UL1685 UL Loading

### Plenum/Non-Plenum

Plenum (Y/N): No

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)	Tolerance (Ohms)
75	± 3

### Nom. Inductance:

Inductance (µH/ft)
.097

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.2

### Nominal Velocity of Propagation:

VP (%)
83

### Nominal Delay:

Delay (ns/ft)
1.2

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
28.0

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
9

### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
5	.5
55	1.4
211	2.6
500	4.1
750	5.1
862	5.5
1000	6.0
1450	7.8
1800	8.6
2250	9.8
3000	11.3

### Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
5	0.67
55	1.60
211	2.87
500	4.48
750	5.59
862	5.98

1000	6.54
1450	8.00
1800	8.80
2250	10.0
3000	11.9

**Max. Operating Voltage - UL:**

<b>Voltage</b>
350 V RMS

**Minimum Structural Return Loss:**

Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
950	2250	15
2250	3000	10

**Sweep Test**

**Sweep Testing:** 950 MHz - 3 GHz

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1829A Q5HU1000	1,000 FT	29.000 LB	WHITE, NEUTRAL	Z	#18 GIFHLDPE SH FR PVC
1829A Q5H1000	1,000 FT	30.000 LB	WHITE, NEUTRAL	Z	#18 GIFHLDPE SH FR PVC
1829A 008U1000	1,000 FT	29.000 LB	GRAY	Z	#18 GIFHLDPE SH FR PVC
1829A 0081000	1,000 FT	30.000 LB	GRAY	Z	#18 GIFHLDPE SH FR PVC
1829A 009U1000	1,000 FT	29.000 LB	WHITE	Z	#18 GIFHLDPE SH FR PVC
1829A 0091000	1,000 FT	30.000 LB	WHITE	Z	#18 GIFHLDPE SH FR PVC
1829A 010U1000	1,000 FT	29.000 LB	BLACK		#18 GIFHLDPE SH FR PVC
1829A 0101000	1,000 FT	30.000 LB	BLACK	C	#18 GIFHLDPE SH FR PVC

**Notes:**

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.


# DBS Cable

## Series 6


Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m

**Series 6 • 18 AWG** Solid .040" Bare Copper or Bare Copper-covered Steel Conductor (see below) • Duobond® II + Aluminum Braid Shield (60% Coverage)


### Gas-injected Foam Polyethylene Insulation • PVC Jacket (Black, Gray, White or Neutral)

80°C 	<b>1829A</b>	NEC:	U-1000†	U-304.8	29.0	13.2	18 AWG (solid) .040" BCCS 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	5	.5	1.6
		CATV CM	1000†	304.8	29.0	13.2											55	1.4	4.6
		CEC:															211	2.6	8.5
		CM															500	4.1	13.5
																	750	5.1	16.7
																	862	5.5	18.0
																	1000	6.0	19.7
																	1450	7.8	25.6
																	1800	8.6	28.2
																	2250	9.8	32.2

†Final put-up length may vary ±10% for spools, ±5% for unreel cartons.


80°C 	<b>1829AC</b>	NEC:	U-1000 <sup>▲</sup>	U-304.8	27.0	12.3	18 AWG (solid) .040" BCAC 6.4Ω/M' 21.0Ω/km	.180	4.57	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	5	.5	1.6
		CATV CM	1000 <sup>▲</sup>	304.8	27.0	12.3											55	1.4	4.6
		CEC:															211	2.6	8.5
		CM															500	4.1	13.5
																	750	5.1	16.7
																	862	5.5	18.0
																	1000	6.0	19.7
																	1450	7.8	25.6
																	1800	8.6	28.2
																	2250	9.8	32.2

<sup>▲</sup>U-1000 ft. put-up available in Black, White or Gray only. 1000 ft. available in White or Black only.


80°C 	<b>1829R</b> <small>new</small>	NEC:	U-1000*	U-304.8	29.0	13.2	18 AWG (solid) .040" BCCS 28.0Ω/M' 21.0Ω/km	.180	4.57	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	5	.5	1.6
		CATVR, CMR															55	1.4	4.6
		CEC:															211	2.6	8.5
		CMG FT4															500	4.1	13.5
																	750	5.1	16.7
																	862	5.5	18.0
																	1000	6.0	19.7
																	1450	7.8	25.6
																	1800	8.6	28.2
																	2250	9.8	32.2

\*U-1000 ft. put-up not available in Neutral.

### Gas-injected Foam Polyethylene Insulation • Black Polyethylene Jacket


Burial 80°C 	<b>1829B</b>	—	1000	304.8	26.0	11.8	18 AWG (solid) .040" BCCS 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	5	.5	1.6
																	55	1.4	4.6
																	211	2.6	8.5
																	500	4.1	13.5
																	750	5.1	16.7
																	862	5.5	18.0
																	1000	6.0	19.7
																	1450	7.8	25.6
																	1800	8.6	28.2
																	2250	9.8	32.2

CoreGuard®

Burial 80°C 	<b>1829BC</b>	—	1000	304.8	27.0	12.3	18 AWG (solid) .040" BCAC 6.4Ω/M' 21.0Ω/km	.180	4.57	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	5	.5	1.6
																	55	1.4	4.6
																	211	2.6	8.5
																	500	4.1	13.5
																	750	5.1	16.7
																	862	5.5	18.0
																	1000	6.0	19.7
																	1450	7.8	25.6
																	1800	8.6	28.2
																	2250	9.8	32.2

CoreGuard®

### Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket

75°C 	<b>1829P</b> <small>new</small>	NEC:	U-1000	U-304.8	27.0	12.3	18 AWG (solid) .040" BCCS 28.0Ω/M' 91.9Ω/km	.170	4.32	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.235	5.97	75	83%	16.3	53.4	1	.3	1.0
		CATVP, CMP	1000	304.8	27.0	12.3											10	.7	2.2
		CEC:															50	1.5	4.9
		CMP FT6															100	2.1	6.9
																	200	3.0	9.8
																	400	4.4	14.4
																	700	6.1	20.0
																	900	7.2	23.6
																	1000	7.6	24.9
																	1450	9.6	31.5

BC = Bare Copper • BCAC = Bare Copper Anti-corrosion • BCCS = Bare Copper-covered Steel • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene

\*Duobond II = Bonded Duofoil® (100% coverage) + aluminum braid (67% coverage).