



Description:

18 AWG solid bare copper-covered steel conductor, gas-injected foam polyethylene insulation, Duobond®II (100% coverage) and an aluminum braid shield (60% coverage), PVC jacket.

Usage (Overall)

Suitable Applications: Satellite, DBS, TV, Antenna

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:	CATVR, CMR
CEC/C(UL) Specification:	CMG
EU CE Mark:	Yes
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
MII Order #39 (China RoHS):	Yes
Series Type:	Series 6

Flame Test

UL Flame Test:	UL1666 Riser, UL1685 FT4 Loading
CSA Flame Test:	FT4
IEEE Flame Test:	IEEE 1202

Plenum/Non-Plenum

Plenum (Y/N):	No
Non-Plenum Number:	1829A

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.)
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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:

Voltage
300 V RMS (CM)

Typical Structural Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Typical SRL (dB)
5	950	30
950	3000	24

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
1829R 008U1000	1,000 FT	31.000 LB	GRAY		#18 GIFHDLPE SH FR PVC
1829R 009U1000	1,000 FT	31.000 LB	WHITE		#18 GIFHDLPE SH FR PVC
1829R 010U1000	1,000 FT	31.000 LB	BLACK		#18 GIFHDLPE SH FR PVC


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 	1829A	NEC: CATV CM CEC: CM	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
			1000†	304.8	29.0	13.2											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

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


80°C 	1829AC	NEC: CATV CM CEC: CM	U-1000 [▲]	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
			1000 [▲]	304.8	27.0	12.3											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

[▲]U-1000 ft. put-up available in Black, White or Gray only. 1000 ft. available in White or Black only.


80°C 	1829R <small>new</small>	NEC: CATVR, CMR CEC: CMG FT4	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
																	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

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

Gas-injected Foam Polyethylene Insulation • Black Polyethylene Jacket


Burial 80°C 	1829B	—	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 	1829BC	—	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 	1829P <small>new</small>	NEC: CATVP, CMP CEC: CMP FT6	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
			1000	304.8	27.0	12.3											10	.7	2.2
																	50	1.5	4.9
																	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).