

**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)**

|                                               |                 |
|-----------------------------------------------|-----------------|
| <b>Installation Temperature Range:</b>        | -30°C To +80°C  |
| <b>Operating Temperature Range:</b>           | -40°C To +80°C  |
| <b>Bulk Cable Weight:</b>                     | 30 lbs/1000 ft. |
| <b>Max. Recommended Pulling Tension:</b>      | 126 lbs.        |
| <b>Min. Bend Radius (Install)/Minor Axis:</b> | 2 in.           |

**Applicable Specifications and Agency Compliance (Overall)****Applicable Standards & Environmental Programs**

|                                        |            |
|----------------------------------------|------------|
| <b>NEC/(UL) Specification:</b>         | CATVR, CMR |
| <b>CEC/C(UL) Specification:</b>        | CMG        |
| <b>EU CE Mark:</b>                     | Yes        |
| <b>EU Directive 2000/53/EC (ELV):</b>  | Yes        |
| <b>EU Directive 2002/95/EC (RoHS):</b> | 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.) |
|-------------|--------------------------|
|-------------|--------------------------|

|      |      |
|------|------|
| 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 GIFHDLDP SH FR PVC |
| 1829R 009U1000 | 1,000 FT | 31.000 LB   | WHITE |       | #18 GIFHDLDP SH FR PVC |
| 1829R 010U1000 | 1,000 FT | 31.000 LB   | BLACK |       | #18 GIFHDLDP SH FR PVC |

## DBS Cable

## Series 6

| Description                                                                                                                                       | Part No.                    | UL NEC/<br>C(UL) CEC<br>Type             | Standard Lengths |                  | Standard Unit Weight |              | Conductor (stranding)<br>Diameter<br>Nom. DCR           | Nominal Core OD |      | Shielding Materials<br>Nom. DCR                                  | Nominal OD |      | Nom. Imp.<br>(Ω) | Nom. Vel.<br>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:<br>CATV CM<br>CEC:<br>CM            | U-1000†<br>1000† | U-304.8<br>304.8 | 29.0<br>29.0         | 13.2<br>13.2 | 18 AWG (solid)<br>.040"<br>BCCS<br>28.0Ω/M'<br>91.9Ω/km | .180            | 4.57 | Duobond II*<br>+ 60%<br>Aluminum<br>Braid<br>9.0Ω/M'<br>29.5Ω/km | .270       | 6.86 | 75               | 83%                   | 16.2                | 53.1 | 5<br>55<br>211<br>500<br>750<br>862<br>1000<br>1450<br>1800<br>2250                      | .5<br>1.4<br>2.6<br>4.1<br>5.1<br>5.5<br>6.0<br>7.8<br>8.6<br>9.8                        | 1.6<br>4.6<br>8.5<br>13.5<br>16.7<br>18.0<br>19.7<br>25.6<br>28.2<br>32.2                       |
| †Final put-up length may vary ±10% for spools, ±5% for unreel cartons.                                                                            |                             |                                          |                  |                  |                      |              |                                                         |                 |      |                                                                  |            |      |                  |                       |                     |      |                                                                                          |                                                                                          |                                                                                                 |
| 80°C                                                                                                                                              | 1829AC                      | NEC:<br>CATV CM<br>CEC:<br>CM            | U-1000*<br>1000* | U-304.8<br>304.8 | 27.0<br>27.0         | 12.3<br>12.3 | 18 AWG (solid)<br>.040"<br>BCAC<br>6.4Ω/M'<br>21.0Ω/km  | .180            | 4.57 | Duobond II*<br>+ 60%<br>Aluminum<br>Braid<br>9.0Ω/M'<br>29.5Ω/km | .270       | 6.86 | 75               | 83%                   | 16.2                | 53.1 | 5<br>55<br>211<br>500<br>750<br>862<br>1000<br>1450<br>1800<br>2250<br>3000              | .5<br>1.4<br>2.6<br>4.1<br>5.1<br>5.5<br>6.0<br>7.8<br>8.6<br>9.8<br>11.3                | 1.6<br>4.6<br>8.5<br>13.5<br>16.7<br>18.0<br>19.7<br>25.6<br>28.2<br>32.2<br>37.1               |
| *U-1000 ft. put-up available in Black, White or Gray only. 1000 ft. available in White or Black only.                                             |                             |                                          |                  |                  |                      |              |                                                         |                 |      |                                                                  |            |      |                  |                       |                     |      |                                                                                          |                                                                                          |                                                                                                 |
| 80°C                                                                                                                                              | 1829R<br><small>new</small> | NEC:<br>CATVR,<br>CMR<br>CEC:<br>CMG FT4 | U-1000*<br>1000* | U-304.8<br>304.8 | 29.0<br>29.0         | 13.2<br>13.2 | 18 AWG (solid)<br>.040"<br>BCCS<br>28.0Ω/M'<br>21.0Ω/km | .180            | 4.57 | Duobond II*<br>+ 60%<br>Aluminum<br>Braid<br>9.0Ω/M'<br>29.5Ω/km | .270       | 6.86 | 75               | 83%                   | 16.2                | 53.1 | 5<br>55<br>211<br>500<br>750<br>862<br>1000<br>1450<br>1800<br>2250<br>3000              | .5<br>1.4<br>2.6<br>4.1<br>5.1<br>5.5<br>6.0<br>7.8<br>8.6<br>9.8<br>11.3                | 1.6<br>4.6<br>8.5<br>13.5<br>16.7<br>18.0<br>19.7<br>25.6<br>28.2<br>32.2<br>37.1               |
| *U-1000 ft. put-up not available in Neutral.                                                                                                      |                             |                                          |                  |                  |                      |              |                                                         |                 |      |                                                                  |            |      |                  |                       |                     |      |                                                                                          |                                                                                          |                                                                                                 |
| Gas-injected Foam Polyethylene Insulation • Black Polyethylene Jacket                                                                             |                             |                                          |                  |                  |                      |              |                                                         |                 |      |                                                                  |            |      |                  |                       |                     |      |                                                                                          |                                                                                          |                                                                                                 |
| Burial<br>80°C                                                                                                                                    | 1829B                       | —                                        | 1000             | 304.8            | 26.0                 | 11.8         | 18 AWG (solid)<br>.040"<br>BCCS<br>28.0Ω/M'<br>91.9Ω/km | .180            | 4.57 | Duobond II*<br>+ 60%<br>Aluminum<br>Braid<br>9.0Ω/M'<br>29.5Ω/km | .270       | 6.86 | 75               | 83%                   | 16.2                | 53.1 | 5<br>55<br>211<br>500<br>750<br>862<br>1000<br>1450<br>1800<br>2250                      | .5<br>1.4<br>2.6<br>4.1<br>5.1<br>5.5<br>6.0<br>7.8<br>8.6<br>9.8                        | 1.6<br>4.6<br>8.5<br>13.5<br>16.7<br>18.0<br>19.7<br>25.6<br>28.2<br>32.2                       |
| Burial<br>80°C                                                                                                                                    | 1829BC                      | —                                        | 1000             | 304.8            | 27.0                 | 12.3         | 18 AWG (solid)<br>.040"<br>BCAC<br>6.4Ω/M'<br>21.0Ω/km  | .180            | 4.57 | Duobond II*<br>+ 60%<br>Aluminum<br>Braid<br>9.0Ω/M'<br>29.5Ω/km | .270       | 6.86 | 75               | 83%                   | 16.2                | 53.1 | 5<br>55<br>211<br>500<br>750<br>862<br>1000<br>1450<br>1800<br>2250<br>3000              | .5<br>1.4<br>2.6<br>4.1<br>5.1<br>5.5<br>6.0<br>7.8<br>8.6<br>9.8<br>11.3                | 1.6<br>4.6<br>8.5<br>13.5<br>16.7<br>18.0<br>19.7<br>25.6<br>28.2<br>32.2<br>37.1               |
| Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket                                                                                         |                             |                                          |                  |                  |                      |              |                                                         |                 |      |                                                                  |            |      |                  |                       |                     |      |                                                                                          |                                                                                          |                                                                                                 |
| 75°C                                                                                                                                              | 1829P<br><small>new</small> | NEC:<br>CATVP,<br>CMP<br>CEC:<br>CMP FT6 | U-1000<br>1000   | U-304.8<br>304.8 | 27.0<br>27.0         | 12.3<br>12.3 | 18 AWG (solid)<br>.040"<br>BCCS<br>28.0Ω/M'<br>91.9Ω/km | .170            | 4.32 | Duobond II*<br>+ 60%<br>Aluminum<br>Braid<br>9.0Ω/M'<br>29.5Ω/km | .235       | 5.97 | 75               | 83%                   | 16.3                | 53.4 | 1<br>10<br>50<br>100<br>200<br>400<br>700<br>900<br>1000<br>1450<br>1800<br>2250<br>3000 | .3<br>.7<br>1.5<br>2.1<br>3.0<br>4.4<br>6.1<br>7.2<br>7.6<br>9.6<br>11.0<br>12.7<br>15.1 | 1.0<br>2.2<br>4.9<br>6.9<br>9.8<br>14.4<br>20.0<br>23.6<br>24.9<br>31.5<br>36.1<br>41.7<br>49.5 |

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).