Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



1829R Coax - DBS Cable

For more Information please call

1-800-Belden1



General 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:

| 1 18 Solid BCCS - Bare Copper Covered Steel .040 | ١ | # Coax | AWG | Stranding | Conductor Material | Dia. (in.) |
|--|---|--------|-----|-----------|----------------------------------|------------|
| | ľ | 1 | 18 | Solid | BCCS - Bare Copper Covered Steel | .040 |

Total Number of Conductors:

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® | Таре | 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 Cable

Overall Nominal Diameter: 0.275 in.

Mechanical Characteristics (Overall)

| Installation Temperature Range: | -30°C To +80°C |
|-----------------------------------|-----------------|
| Operating Temperature Range: | -40°C To +80°C |
| Bulk Cable Weight: | 29 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 126 lbs. |
| Min. Bend Radius/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 Directive 2011/65/EU (ROHS II): | Yes |
| 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 |
| | :: |

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| М | MII Order #39 (China RoHS): | Yes |
|-------|-----------------------------|----------|
| S | eries Type: | Series 6 |
| Flame | e Test | |
| С | SA Flame Test: | FT4 |
| Plenu | ım/Non-Plenum | |
| P | Plenum (Y/N): | No |
| N | Ion-Plenum Number: | 1829A |

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

| Impedance (Ohm) | Tolerance (Ohms) |
|-----------------|------------------|
| 75 | ± 3 |

Nom. Inductance:

Inductance (µH/ft)

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft) 16.2

Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 28.0

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

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 |

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| 950 | 3000 | 24 |
|-----|------|----|

Minimum Structural Return Loss:

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

Sweep Test

950 MHz - 3 GHz Sweep Testing:

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|----------------|----------|-------------|-------|-------|-------------------------|
| 1829R 008U1000 | 1,000 FT | 32.000 LB | GRAY | | #18 GIFHDLDPE SH FR PVC |
| 1829R 009U1000 | 1,000 FT | 32.000 LB | WHITE | | #18 GIFHDLDPE SH FR PVC |
| 1829R 010U1000 | 1,000 FT | 32.000 LB | BLACK | | #18 GIFHDLDPE SH FR PVC |

Revision Number: 3 Revision Date: 08-09-2012

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