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please call

1-800-Belden1



### General Description:

23 AWG solid .023" bare copper conductor, gas-injected foam FEP insulation, Duofoil® (100% coverage) plus a tinned copper braid shield (95% coverage), flexible Flamarrest® jacket.

### Usage (Overall)

Suitable Applications:

SDI/HDTV Digital Video, High Definition (HD), Standard Definition (SDI) and Digital Audio Equipment in Professional & Commercial Applications such as TV Stations, Stadiums & Arenas, Convention Center, and other large facilities requiring high quality digital video transmissions, Plenum Applications

### Physical Characteristics (Overall)

#### Conductor

AWG:

| # Coax | AWG | Stranding | Conductor Material | Dia. (in.) |
|--------|-----|-----------|--------------------|------------|
| 1      | 23  | Solid     | BC - Bare Copper   | 0.023      |

Total Number of Conductors:

1

#### Insulation

Insulation Material:

| Insulation Material                                    | Dia. (in.) |
|--|------------|
| Gas-injected FEP - Foam Fluorinated Ethylene Propylene | 0.102      |

#### Outer Shield

Outer Shield Material:

| Layer # | Outer Shield Trade Name | Type  | Outer Shield Material                      | Coverage (%) |
|---------|-------------------------|-------|--|--------------|
| 1       | Duofoil®                | Tape  | Aluminum Foil-Polyester Tape-Aluminum Foil | 100          |
| 2       |                         | Braid | TC - Tinned Copper                         | 95           |

#### Outer Jacket

Outer Jacket Material:

| Outer Jacket Trade Name | Outer Jacket Material                 |
|-------------------------|---------------------------------------|
| Flamarrest®             | LS PVC - Low Smoke Polyvinyl Chloride |

#### Overall Cable

Overall Nominal Diameter:

0.159 in.

### Mechanical Characteristics (Overall)

Operating Temperature Range:

-20°C To +75°C

UL Temperature Rating:

75°C

Bulk Cable Weight:

21 lbs/1000 ft.

Max. Recommended Pulling Tension:

40 lbs.

Min. Bend Radius/Minor Axis:

1.500 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:

CMP

CEC/C(UL) Specification:

CMP

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):

03/28/2008

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                |
| RG Type:                          | Sub-miniature 59/U |

**Flame Test**

|                 |                      |
|-----------------|----------------------|
| UL Flame Test:  | UL910 Steiner Tunnel |
| CSA Flame Test: | FT6                  |

**Suitability**

|                       |                   |
|-----------------------|-------------------|
| Suitability - Indoor: | Yes               |
| Suitability - Aerial: | Yes - Black only. |
| Sunlight Resistance:  | No                |

**Plenum/Non-Plenum**

|                    |       |
|--------------------|-------|
| Plenum (Y/N):      | Yes   |
| Non-Plenum Number: | 1855A |

**Electrical Characteristics (Overall)**

**Nom. Characteristic Impedance:**

Impedance (Ohm)  
75

**Nom. Inductance:**

Inductance (µH/ft)  
0.300

**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/ft)  
16.300

**Nominal Velocity of Propagation:**

VP (%)  
80.000

**Nominal Delay:**

Delay (ns/ft)  
1.22

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)  
20.100

**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)  
3.700

**Nom. Attenuation:**

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| 1.000       | 0.380                    |
| 3.600       | 0.760                    |
| 10.000      | 1.300                    |
| 71.500      | 3.100                    |
| 135.000     | 4.100                    |
| 270.000     | 5.800                    |
| 360.000     | 6.900                    |
| 540.000     | 8.700                    |
| 720.000     | 10.300                   |
| 750.000     | 10.500                   |
| 1000.000    | 12.400                   |
| 1500.000    | 15.700                   |
| 2250.000    | 19.900                   |
| 3000.000    | 23.800                   |
| 4500.000    | 30.300                   |

**Max. Operating Voltage - UL:**

Voltage  
300 V RMS

|   |   |
|---|---|
| <b>Other Electrical Characteristic 1:</b> | Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge and termination. 75 +/- 1.5 Ohms |
| <b>Other Electrical Characteristic 2:</b> | Return loss tested in accordance with ASTM D-4566 paragraph 45.3 using a 75 Ohm fixed bridge and termination.                         |

**Minimum Return Loss:**

| Start Freq. (MHz) | Stop Freq. (MHz) | Min. RL (dB) |
|-------------------|------------------|--------------|
| 5                 | 1600             | 23           |
| 1601              | 4500             | 21           |

**Sweep Test**

Sweep Testing: 100#37; Sweep tested 5 MHz to 4.5 GHz.

**Misc. Information (Overall)**

**Put Ups and Colors:**

| Item #        | Putup    | Ship Weight | Color       | Notes | Item Desc         |
|---------------|----------|-------------|-------------|-------|-------------------|
| 1855P N3U1000 | 1,000 FT | 22.000 LB   | GREEN, MIL  |       | #23 FFEP SH FLRST |
| 1855P 0011000 | 1,000 FT | 22.000 LB   | BROWN       |       | #23 FFEP SH FLRST |
| 1855P 0021000 | 1,000 FT | 22.000 LB   | RED         |       | #23 FFEP SH FLRST |
| 1855P 0031000 | 1,000 FT | 22.000 LB   | ORANGE      |       | #23 FFEP SH FLRST |
| 1855P 0041000 | 1,000 FT | 22.000 LB   | YELLOW      |       | #23 FFEP SH FLRST |
| 1855P 0061000 | 1,000 FT | 22.000 LB   | BLUE, LIGHT |       | #23 FFEP SH FLRST |
| 1855P 0071000 | 1,000 FT | 22.000 LB   | VIOLET      |       | #23 FFEP SH FLRST |
| 1855P 0081000 | 1,000 FT | 22.000 LB   | GRAY        |       | #23 FFEP SH FLRST |
| 1855P 0101000 | 1,000 EA | 22.000 LB   | BLACK       |       | #23 FFEP SH FLRST |
| 1855P 8771000 | 1,000 FT | 22.000 LB   | NATURAL     |       | #23 FFEP SH FLRST |

Revision Number: 3 Revision Date: 11-13-2013

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