

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

BELDEN
SENDING ALL THE RIGHT SIGNALS

1855P Coax - Sub-Miniature Plenum



For more Information
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:

SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080p, 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. (mm)
1	23	Solid		BC - Bare Copper	0.584

Total Number of Conductors:

1

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FEP - Foam Fluorinated Ethylene Propylene	2.591

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:

4.039 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:

-20°C To +75°C

UL Temperature Rating:

75°C

Bulk Cable Weight:

31.252 Kg/Km

Max. Recommended Pulling Tension:

177.928 N

Min. Bend Radius/Minor Axis:

38.100 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:

CMP

CEC/C(UL) Specification:

CMP

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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
MII 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 (μ H/m)
0.984

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
53.480

Nominal Velocity of Propagation:

VP (%)
80.000

Nominal Delay:

Delay (ns/m)
4.00282

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
65.948

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
12.140

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1.000	1.247
3.600	2.494
10.000	4.265

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71.500	10.171
135.000	13.452
270.000	19.030
360.000	22.639
540.000	28.545
720.000	33.794
750.000	34.451
1000.000	40.684
1500.000	51.512
2250.000	65.292
3000.000	78.088
4500.000	99.414
6000.000	119.428

Max. Operating Voltage - UL:

Voltage
300 V RMS

Other Electrical Characteristic 1: TDR Impedance: 75 +/- 3 Ohms

Other Electrical Characteristic 2: Return Loss: Fixed bridge and termination.

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5.000	1600.000	23.000
1600.000	4500.000	21.000
4500.000	6000.000	15.000

Sweep Test

Sweep Testing: 100#37; Sweep tested 5 MHz to 6 GHz.

Notes (Overall)

Notes: Print legend includes sequential footage marks.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
VDM230TS-0.41	1,000 FT	24.000 LB	BLACK		23 AWG 1C MINI HD/SDI COAX CMP
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 FT	22.000 LB	BLACK		#23 FFEP SH FLRST
1855P 8771000	1,000 FT	22.000 LB	NATURAL		#23 FFEP SH FLRST

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