# **Detailed Specifications & Technical Data**

# METRIC MEASUREMENT VERSION



## 1855A Coax - Sub-Miniature

For more Information please call

1-800-Belden1



# **General Description:**

23 AWG solid .023" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), PVC jacket.

# Usage (Overall)

Suitable Applications: SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080p

## **Physical Characteristics (Overall)**

## Conductor

## AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	23	Solid	BC - Bare Copper	0.5842

Total Number of Conductors:

## Insulation

#### Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	2.5908

#### Outer Shield

#### Outer Shield Material:

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

### **Outer Jacket**

### Outer Jacket Material:

# Outer Jacket Material PVC - Polyvinyl Chloride

## Overall Cable

Overall Nominal Diameter: 4.039 mm

## **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-30°C To +75°C
UL Temperature Rating:	75°C
Bulk Cable Weight:	25.299 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:	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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MII Order #39 (China RoHS):	Yes
RG Type:	Sub-miniature 59/U
Flame Test	
UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4
Suitability	
Suitability - Indoor:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No
Plenum Number:	1855P

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



Nominal Delay:

Delay (ns/m) 4.00282

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 65.9481

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1.000	1.280
3.580	2.559
5.000	3.019
6.000	3.281
7.000	3.543
10.000	3.937
12.000	4.265
25.000	5.906
67.500	9.285
71.500	9.613
88.500	10.565
100.000	11.123
135.000	12.599
143.000	13.124
180.000	14.469
270.000	17.849
360.000	20.802
540.000	25.756
720.000	30.021
750.000	30.546
1000.000	35.730
1500.000	43.900
2000.000	51.315
2250.000	54.727
3000.000	64.472
4500.000	79.892
6000.000	95.051

Max. Operating Voltage - UL:

Voltage 300 V RMS

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Other Electrical Characteristic 1:

IDR Impedance: 75 +/- 1.5 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
1601.000	4500.000	21.000
4500.000	6000.000	15.000

#### Sweep Test

Sweep Testing:

100% Sweep tested 5 MHz to 6 GHz.

#### Misc. Information (Overall)

## Notes (Overall)

Notes: Also available in 4.5 GHz multi-coax bundled versions. See 7787A through 7792A.

#### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1855A N3UN1000	1,000 FT	21.000 LB	GREEN, MIL		#23 PE/GIFHDPE SH FR PVC
1855A N3U1000	1,000 FT	19.000 LB	GREEN, MIL	С	#23 PE/GIFHDPE SH FR PVC
1855A 001N1000	1,000 FT	21.000 LB	BROWN		#23 PE/GIFHDPE SH FR PVC
1855A 0011000	1,000 FT	19.000 LB	BROWN	С	#23 PE/GIFHDPE SH FR PVC
1855A 002N1000	1,000 FT	21.000 LB	RED		#23 PE/GIFHDPE SH FR PVC
1855A 0021000	1,000 FT	19.000 LB	RED	С	#23 PE/GIFHDPE SH FR PVC
1855A 003N1000	1,000 FT	21.000 LB	ORANGE		#23 PE/GIFHDPE SH FR PVC
1855A 0031000	1,000 FT	19.000 LB	ORANGE	С	#23 PE/GIFHDPE SH FR PVC
1855A 004N1000	1,000 FT	21.000 LB	YELLOW		#23 PE/GIFHDPE SH FR PVC
1855A 0041000	1,000 FT	19.000 LB	YELLOW	С	#23 PE/GIFHDPE SH FR PVC
1855A 006N1000	1,000 FT	21.000 LB	BLUE, LIGHT		#23 PE/GIFHDPE SH FR PVC
1855A 0061000	1,000 FT	19.000 LB	BLUE, LIGHT	С	#23 PE/GIFHDPE SH FR PVC
1855A 007N1000	1,000 FT	21.000 LB	VIOLET		#23 PE/GIFHDPE SH FR PVC
1855A 0071000	1,000 FT	19.000 LB	VIOLET	С	#23 PE/GIFHDPE SH FR PVC
1855A 008N1000	1,000 FT	21.000 LB	GRAY		#23 PE/GIFHDPE SH FR PVC
1855A 0081000	1,000 FT	19.000 LB	GRAY	С	#23 PE/GIFHDPE SH FR PVC
1855A 009N1000	1,000 FT	21.000 LB	WHITE		#23 PE/GIFHDPE SH FR PVC
1855A 0091000	1,000 FT	19.000 LB	WHITE	С	#23 PE/GIFHDPE SH FR PVC
1855A 010N1000	1,000 FT	21.000 LB	BLACK		#23 PE/GIFHDPE SH FR PVC
1855A 0101000	1,000 FT	19.000 LB	BLACK	С	#23 PE/GIFHDPE SH FR PVC
1855A 010500	500 FT	9.500 LB	BLACK		#23 PE/GIFHDPE SH FR PVC

### Notes:

C = CRATE REEL PUT-UP.

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