# **Detailed Specifications & Technical Data**

# **ENGLISH 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. (in.) Solid BC - Bare Copper **Total Number of Conductors:** Insulation Insulation Material: **Insulation Material** Gas-injected FHDPE - Foam High Density Polyethylene | .102

Outer Shield Material:

Layer #	Outer Shield Trade Name	ield 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 Material PVC - Polyvinyl Chloride

# **Overall Cable**

**Overall Nominal Diameter:** 0.159 in.

Med	Mechanical Characteristics (Overall)				
	Operating Temperature Range:	-30°C To +75°C			
	UL Temperature Rating:	75°C			
	Bulk Cable Weight:	17 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:	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/ft) 1.22

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 20.1

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1.000	0.390
3.580	0.780
5.000	0.920
6.000	1.000
7.000	1.080
10.000	1.200
12.000	1.300
25.000	1.800
67.500	2.830
71.500	2.930
88.500	3.220
100.000	3.390
135.000	3.840
143.000	4.000
180.000	4.410
270.000	5.440
360.000	6.340
540.000	7.850
720.000	9.150
750.000	9.310
1000.000	10.890
1500.000	13.380
2000.000	15.640
2250.000	16.680
3000.000	19.650
4500.000	24.350
6000.000	28.970

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	
1600.000	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: Print legend includes sequential footage marks. Also available in 4.5 GHz multi-coax bundled versions. See 7787A through 7792A, 2178A.

#### **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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