

## 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.

Image: Physical Characteristics (Overall)         Conductor         AWG:         # Coax AWG Stranding Conductor Material Dia. (in.)         1       23         Solid       BC - Bare Copper         .023         Total Number of Conductors:       1         Insulation         Insulation Material:         Insulation Material         Gas-injected FHDPE - Foam High Density Polyethylene         .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         2       Braid       TC - Tinned Copper	
# Coax AWG Stranding Conductor Material Dia. (in.)   1 23   Solid BC - Bare Copper   .023   Total Number of Conductors:   1   Insulation Insulation Material:    Insulation Material:   Insulation Material:   Cas-injected FHDPE - Foam High Density Polyethylene   .102   Outer Shield Material:   Layer # Outer Shield Trade Name Type   Outer Shield Trade Name Type   Outer Shield Trade Name Type   Auminum Foil-Polyester Tape-Aluminum Foil	
1 23 Solid BC - Bare Copper .023   Total Number of Conductors:   1   Insulation Material:    Insulation Material:   Insulation Material:   Dia. (in.)    Guter Shield Material:   Layer # Outer Shield Trade Name   1   Duter Shield Material:   Layer # Outer Shield Trade Name   1   Duter Shield Material:   Layer # Outer Shield Trade Name   1   Duter Shield Material:   Layer # Outer Shield Trade Name   1   Due Shield Material:   1   Due Shield Trade Name   Type Outer Shield Material:   1   Due Shield Material:   1   Dia. (Instance Shield Material Coverage (%)	
Total Number of Conductors:       1         Insulation Insulation Material:       Dia. (in.)         Gas-injected FHDPE - Foam High Density Polyethylene       .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	
Insulation Material: Insulation Material: Insulation Material Gas-injected FHDPE - Foam High Density Polyethylene .102 Outer Shield Material: Layer # Outer Shield Trade Name Type Outer Shield Material Coverage (%) 1 Duofoil® Tape Aluminum Foil-Polyester Tape-Aluminum Foil 100	
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Insulation Material     Dia. (in.)       Gas-injected FHDPE - Foam High Density Polyethylene     102       Outer Shield     Southartial:       Layer # Outer Shield Trade Name     Type     Outer Shield Material       1     Duofoil®     Tape       Aluminum Foil-Polyester Tape-Aluminum Foil     100	
Gas-injected FHDPE - Foam High Density Polyethylene       .102         Outer Shield Material:         Layer # Outer Shield Trade Name       Type       Outer Shield Material       Coverage (%)         1       Duofoil®       Tape       Aluminum Foil-Polyester Tape-Aluminum Foil       100	
Outer Shield Material:         Layer # Outer Shield Trade Name Type Outer Shield Material Coverage (%)         1       Duofoil®       Tape       Aluminum Foil-Polyester Tape-Aluminum Foil       100	
Layer # Outer Shield Trade Name     Type     Outer Shield Material     Coverage (%)       1     Duofoil®     Tape     Aluminum Foil-Polyester Tape-Aluminum Foil     100	
1 Duofoil® Tape Aluminum Foil-Polyester Tape-Aluminum Foil 100	
Overall Cable Overall Nominal Diameter: 0.159 in.	
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	

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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
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:

Impedance (Ohm)	
75	

Nom. Inductance:

Inductance (µH/ft)

.107

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

16.3

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	2.860
88.500	3.160
100.000	3.330
135.000	3.810
143.000	3.920
180.000	4.380
270.000	5.400





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Minimum R	eturn Loss:	
	lectrical Characteristic	Return loss tested in accordance with ASTM D-4566 paragraph 45.3 using a 75 Ohm fixed bridge and termination.
Other E	lectrical Characteristic	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
Voltage 300 V RMS	5	
Max. Operat	ting Voltage - UL:	
4500.000	22.800	
3000.000	18.500	
2250.000	16.000	
2000.000	15.100	
1500.000	13.000	
1000.000	10.600	
750.000	9.230	
720.000	9.000	
540.000	7.700	
360.000	6.200	

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

#### **Sweep Test**

Sweep Testing:

100% Sweep tested 5 MHz to 4.5 GHz.

### Misc. Information (Overall)

### Notes (Overall)

Notes: Also available in multiples, bundled. See 7787A through 7792A.

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

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1855A N3U1000	1,000 FT	19.000 LB	GREEN, MIL	С	#23 PE/GIFHDPE SH FR PVC
1855A 0011000	1,000 FT	19.000 LB	BROWN	С	#23 PE/GIFHDPE SH FR PVC
1855A 0021000	1,000 FT	19.000 LB	RED	С	#23 PE/GIFHDPE SH FR PVC
1855A 0031000	1,000 FT	19.000 LB	ORANGE	С	#23 PE/GIFHDPE SH FR PVC
1855A 0041000	1,000 FT	19.000 LB	YELLOW	С	#23 PE/GIFHDPE SH FR PVC
1855A 0061000	1,000 FT	19.000 LB	BLUE, LIGHT	С	#23 PE/GIFHDPE SH FR PVC
1855A 0071000	1,000 FT	19.000 LB	VIOLET	С	#23 PE/GIFHDPE SH FR PVC
1855A 0081000	1,000 FT	19.000 LB	GRAY	С	#23 PE/GIFHDPE SH FR PVC
1855A 0091000	1,000 FT	19.000 LB	WHITE	С	#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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