



## Product: 1855A

Serial Digital Coax, Sub-miniature, #23 Solid BC, Foil + 95% TC braid, CMR

### Product Description

Low Loss Serial Digital Coax, Riser-CMR, Sub-Miniature 23 AWG solid bare copper conductor, foam HDPE core, Duofoil, +95% tinned copper braid, PVC jacket

### Technical Specifications

#### Product Overview

Environmental Space:	Indoor - Riser
Suitable Applications:	SMPTE 2081-1 6 Gb/s UHD TV, SMPTE 424M 3 Gb/s HD-SDI 1080P

#### Physical Characteristics (Overall)

##### Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
23	Solid	BC - Bare Copper	0.023 in	1

Conductor Count:	1
------------------	---

##### Insulation

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.102 in

##### Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Duofoil®	100 %
Braid	2	TC - Tinned Copper		95 %

##### Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.159 in

#### Electrical Characteristics

##### Conductor DCR

Nominal Conductor DCR	Outer Conductor DCR
20.1 Ohm/1000ft	3.7 Ohm/1000ft

##### Capacitance

Nom. Capacitance Conductor to Shield
16.3 pF/ft

##### Inductance

Nominal Inductance
0.107 $\mu$ H/ft

##### Impedance

Nominal Characteristic Impedance
75 Ohm

#### Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5 MHz - 1600 MHz	23 dB
1600 MHz - 4500 MHz	21 dB
4500 MHz - 6000 MHz	15 dB

#### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.39 dB/100ft
3.58 MHz	0.78 dB/100ft
5 MHz	0.92 dB/100ft
6 MHz	1.00 dB/100ft
7 MHz	1.08 dB/100ft
10 MHz	1.2 dB/100ft
12 MHz	1.3 dB/100ft
25 MHz	1.8 dB/100ft
67.5 MHz	2.83 dB/100ft
71.5 MHz	2.93 dB/100ft
88.5 MHz	3.22 dB/100ft
100 MHz	3.39 dB/100ft
135 MHz	3.84 dB/100ft
143 MHz	4.00 dB/100ft
180 MHz	4.41 dB/100ft
270 MHz	5.44 dB/100ft
360 MHz	6.34 dB/100ft
540 MHz	7.85 dB/100ft
720 MHz	9.15 dB/100ft
750 MHz	9.31 dB/100ft
1000 MHz	10.89 dB/100ft
1500 MHz	13.38 dB/100ft
2000 MHz	15.64 dB/100ft
2250 MHz	16.68 dB/100ft
3000 MHz	19.65 dB/100ft
4500 MHz	24.35 dB/100ft
6000 MHz	28.97 dB/100ft

#### Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.24 ns/ft	82 %

#### Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes:	TDR Impedance: 75 +/- 1.5 Ohms
Other Electrical Characteristic 2:	Return Loss: Fixed bridge and termination

#### Temperature Range

UL Temp Rating:	75°C
Operating Temp Range:	-30°C To +75°C

#### Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	17 lbs/1000ft
Max Recommended Pulling Tension:	33 lbs
Min Bend Radius/Minor Axis:	1.6 in

#### Standards

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
CPR Euroclass:	Eca

RG Type:	Mini 59/U Type
----------	----------------

### Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
MII Order #39 (China RoHS):	Yes

### Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

### Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft
CSA Flammability:	FT4
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

### Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1855P

### Part Number

Related Parts:	1855ABHD3
----------------	-----------

### Variants

Item #	Color	UPC	Length	Footnote
1855A 0101000	Black	612825358503	1,000 ft	C
1855A 010500	Black	612825356950	500 ft	
1855A 010N1000	Black		1,000 ft	
1855A.00500	Black		500 m	
1855A 010Z1000	Black	612825434993	1,000 ft	
1855A 0105000	Black	612825436126	5,000 ft	
1855A 0061000	Blue, Light	612825358459	1,000 ft	C
1855A 006N1000	Blue, Light		1,000 ft	
1855A 006Z1000	Blue, Light	612825434955	1,000 ft	
1855A 0065000	Blue, Light	612825436072	5,000 ft	
1855A 0011000	Brown	612825356851	1,000 ft	C
1855A 001N1000	Brown		1,000 ft	
1855A 0015000	Brown	612825436027	5,000 ft	
1855A 0081000	Gray	612825358510	1,000 ft	C
1855A 008N1000	Gray		1,000 ft	
1855A 0085000	Gray	612825436096	5,000 ft	
1855A N3U1000	Green, Mil	612825358480	1,000 ft	C
1855A N3UN1000	Green, Mil		1,000 ft	
1855A N3UZ1000	Green, Mil	612825435006	1,000 ft	
1855A N3U5000	Green, Mil	612825436133	5,000 ft	
1855A 0031000	Orange	612825356844	1,000 ft	C
1855A 003N1000	Orange		1,000 ft	
1855A 003Z1000	Orange	612825434931	1,000 ft	
1855A 0035000	Orange	612825436041	5,000 ft	
1855A 0021000	Red	612825358473	1,000 ft	C
1855A 002N1000	Red		1,000 ft	

1855A 002Z1000	Red	612825434917	1,000 ft	
1855A 0025000	Red	612825436034	5,000 ft	
1855A 0071000	Violet	612825356837	1,000 ft	C
1855A 007N1000	Violet		1,000 ft	
1855A 007Z1000	Violet	612825434962	1,000 ft	
1855A 0075000	Violet	612825436089	5,000 ft	
1855A 0091000	White	612825358497	1,000 ft	C
1855A 009N1000	White		1,000 ft	
1855A 009Z1000	White	612825434986	1,000 ft	
1855A 0095000	White	612825436102	5,000 ft	
1855A 0041000	Yellow	612825358466	1,000 ft	C
1855A 004N1000	Yellow		1,000 ft	
1855A 004Z1000	Yellow	612825434948	1,000 ft	
1855A 0045000	Yellow	612825436065	5,000 ft	

Footnote:	C - CRATE REEL PUT-UP.
-----------	------------------------

**Product Notes**

Notes:	Print legend includes sequential footage marks.
--------	---

**History**

Update and Revision:	Revision Number: 0.291 Revision Date: 01-31-2020
----------------------	--

© 2020 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.