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please call

1-800-Belden1



### General Description:

25 AWG stranded (19x37) .021" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	25	19x37	BC - Bare Copper	0.5334

Total Number of Conductors: 1

#### Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	2.3876

#### 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 Material
PVC - Polyvinyl Chloride

#### Overall Cable

Overall Nominal Diameter: 3.810 mm

### Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +75°C
UL Temperature Rating:	75°C
Bulk Cable Weight:	20.835 Kg/Km
Max. Recommended Pulling Tension:	133.446 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 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
MII Order #39 (China RoHS):	Yes
RG Type:	Sub-miniature 59/U

**Flame Test**

UL Flame Test:	UL1666 Vertical Shaft
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**Suitability**

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black Only
Suitability - Aerial:	Yes - Black only, when supported by a messenger wire

**Plenum/Non-Plenum**

Plenum (Y/N):	No
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**Electrical Characteristics (Overall)****Nom. Characteristic Impedance:**

Impedance (Ohm)
75

**Nom. Inductance:**

Inductance (μH/m)
0.305133

**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/m)
54.1365

**Nominal Velocity of Propagation:**

VP (%)
82

**Nominal Delay:**

Delay (ns/m)
4.06844

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/km)
89.8994

**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/km)
17.7174

**Nom. Attenuation:**

Freq. (MHz)	Attenuation (dB/100m)
1	1.54207
3.58	3.281
5	3.6091
7	4.2653
10	5.2496
67.5	11.8116
71.5	12.1397
88.5	13.4521
100	14.4364
135	16.405
143	16.7331
180	19.0298
270	23.2951
360	26.9042

540	33.1381
720	38.7158
750	39.372
1000	45.6059
1500	55.777
2000	64.3076
2250	68.2448
3000	78.744

**Max. Operating Voltage - UL:**

<b>Voltage</b>
300 V RMS

**Other Electrical Characteristic 1:**

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

**Other Electrical Characteristic 2:**

Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, using a 75 Ohm fixed bridge and termination.

**Minimum Return Loss:**

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5	850	21
851	3000	18

**Sweep Test****Sweep Testing:**

100% Sweep tested 5 MHz to 3 GHz.

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1865A N3U1000	305 MT	7.258 KG	GREEN, MIL		#25 GIFHDPE SH FR PVC
1865A 0011000	305 MT	7.258 KG	BROWN	C	#25 GIFHDPE SH FR PVC
1865A 0021000	305 MT	7.258 KG	RED	C	#25 GIFHDPE SH FR PVC
1865A 0031000	305 MT	7.258 KG	ORANGE		#25 GIFHDPE SH FR PVC
1865A 0041000	305 MT	7.258 KG	YELLOW		#25 GIFHDPE SH FR PVC
1865A 0061000	305 MT	7.258 KG	BLUE, LIGHT	C	#25 GIFHDPE SH FR PVC
1865A 0071000	305 MT	7.258 KG	VIOLET	C	#25 GIFHDPE SH FR PVC
1865A 0081000	305 MT	7.258 KG	GRAY		#25 GIFHDPE SH FR PVC
1865A 0091000	305 MT	7.258 KG	WHITE	C	#25 GIFHDPE SH FR PVC
1865A 0101000	305 MT	7.258 KG	BLACK	C	#25 GIFHDPE SH FR PVC

**Notes:**

C = CRATE REEL PUT-UP.

**Test Reports****a) UL**

- i) UL Test Reports are available on-line through the UL Client Document Access web portal.
- ii) UL Inspection Reports are also available through the UL Client Document Access web portal.

**b) CSA**

- i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.
- ii) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

\* other test data may be available if requested at time of order.

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## **1865A Coax - Sub-Miniature**

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