



**Part Number:** 1865A

Serial Digital Coax, Sub-miniature, #25 Stranded BC, CMR

## Product Description

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

## Technical Specifications

### Construction and Dimensions

#### Conductor:

AWG	Stranding	Material	Nominal Diameter	No. of Coax
25	19x37	BC - Bare Copper	0.021 in	1
<b>Total Number of Conductors:</b>				1

#### Insulation:

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.094 in

#### Outershield 1:

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

#### Outerjacket 1:

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.15 in

## Electrical Characteristics

#### Conductor DCR:

Nominal Conductor DCR	Nominal Outer Shield DCR
27.4 Ohm/1000ft	5.4 Ohm/1000ft

### Capacitance:

Nom. Capacitance Conductor to Shield
16.5 pF/ft

Other Electrical Characteristic 1:	Impedance tested in accordance with ASTM D-4566 paragraph 48.2, 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 50.3, using a 75 Ohm fixed bridge and termination.
Sweep Testing:	100% Sweep tested 5 MHz to 3 GHz.

### Impedance:

Nominal Characteristic Impedance
75 Ohm

### High Frequency (Nominal/Typical):

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.47 dB/100ft
3.58 MHz	1 dB/100ft
5 MHz	1.1 dB/100ft
7 MHz	1.3 dB/100ft
10 MHz	1.6 dB/100ft
67.5 MHz	3.6 dB/100ft
71.5 MHz	3.7 dB/100ft
88.5 MHz	4.1 dB/100ft
100 MHz	4.4 dB/100ft
135 MHz	5 dB/100ft
143 MHz	5.1 dB/100ft
180 MHz	5.8 dB/100ft
270 MHz	7.1 dB/100ft
360 MHz	8.2 dB/100ft
540 MHz	10.1 dB/100ft
720 MHz	11.8 dB/100ft
750 MHz	12 dB/100ft
1000 MHz	13.9 dB/100ft
1500 MHz	17 dB/100ft
2000 MHz	19.6 dB/100ft
2250 MHz	20.8 dB/100ft
3000 MHz	24 dB/100ft

## Delay:

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

## High Freq:

Min. RL (Return Loss) [dB]
21 dB
18 dB

## Inductance:

Nominal Inductance
0.093 $\mu$ H/ft

## Voltage:

UL Voltage Rating
300V RMS V

## Use

Suitability - Indoor:	Yes
Max Recommended Pulling Tension:	27 lbs

## Safety

UL Flammability:	UL1666 Vertical Shaft
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## Temperature Range

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

## Mechanical Characteristics

Min Bend Radius/Minor Axis:	1.5 in
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## Part Number

Plenum (Y/N):	No
Suggested Connectors:	BNC - Kings 2025-47-9

## Standards

CA Prop 65 (CJ for Wire & Cable):	Yes
CEC/C(UL) Specification:	CMG
MII Order #39 (China RoHS):	Yes
NEC/(UL) Specification:	CMR
RG Type:	Sub-miniature 59/U
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes

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## Product Variants

Part Number	Color	Put-Up Type	Length
1865A	BROWN	Reel	1000 ft
1865A	BROWN	Reel	305 m
1865A 0011000	BROWN	Reel	1000 ft
1865A	RED	Reel	1000 ft
1865A	RED	Reel	305 m
1865A 0021000	RED	Reel	1000 ft
1865A	ORANGE	Reel	1000 ft
1865A	ORANGE	Reel	305 m
1865A 0031000	ORANGE	Reel	1000 ft
1865A	YELLOW	Reel	1000 ft
1865A	YELLOW	Reel	305 m
1865A 0041000	YELLOW	Reel	1000 ft
1865A	BLUE, LIGHT	Reel	1000 ft
1865A	BLUE, LIGHT	Reel	305 m
1865A 0061000	BLUE, LIGHT	Reel	1000 ft
1865A	VIOLET	Reel	1000 ft
1865A	PURPLE	Reel	305 m
1865A 0071000	VIOLET	Reel	1000 ft
1865A	GRAY	Reel	1000 ft
1865A	GRAY	Reel	305 m
1865A 0081000	GRAY	Reel	1000 ft
1865A	WHITE	Reel	1000 ft
1865A	WHITE	Reel	305 m
1865A 0091000	WHITE	Reel	1000 ft
1865A	BLACK	Reel	1000 ft
1865A	BLACK	Reel	305 m
1865A 0101000	BLACK	Reel	1000 ft
1865A	GREEN, MIL	Reel	1000 ft
1865A	MIL GREEN	Reel	305 m
1865A N3U1000	GREEN, MIL	Reel	1000 ft
1865A			

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