



Product: [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

Physical Characteristics (Overall)

Conductor				
AWG	Stranding	Material	Nominal Diameter	No. of Coax
25	19x37	BC - Bare Copper	0.021 in	1
Conductor Count:				1
Insulation				
Material		Nominal Diameter		
PE - Polyethylene (Foam)		0.094 in		
Table Notes:				Gas Injected

Outer Shield				
Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	2	Tinned Copper (TC)		95%

Outer Jacket	
Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.15 in

Electrical Characteristics

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

Capacitance	
Nom. Capacitance Conductor to Shield	
16.5 pF/ft	

Inductance	
Nominal Inductance	
0.093 µH/ft	

Impedance	
Nominal Characteristic Impedance	
75 Ohm	

Return Loss (RL)	
Frequency [MHz]	Minimum Return (RL)

5-850 MHz	21 dB
850-3000 MHz	18 dB

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%

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

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

Mechanical Characteristics

Bulk Cable Weight:	14 lbs/1000ft
Max. Pull Tension:	27 lbs
Min. Bend Radius/Minor Axis:	1.5 in

Standards

NEC/(UL) Compliance:	CMR
CEC/C(UL) Compliance:	CMG
CPR Euroclass:	Eca
RG Type:	Sub-miniature 59

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Riser
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes

MII Order #39 (China RoHS):	Yes
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Suitability

Suitability - Indoor:	Yes
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Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
1865A 0101000	Black	Reel	1,000 ft	612825358435
1865A 0061000	Blue, Light	Reel	1,000 ft	612825356752
1865A 0011000	Brown	Reel	1,000 ft	612825356790
1865A 0081000	Gray	Reel	1,000 ft	612825356745
1865A N3U1000	Green, Mil	Reel	1,000 ft	612825356806
1865A 0031000	Orange	Reel	1,000 ft	612825356776
1865A 0021000	Red	Reel	1,000 ft	612825356783
1865A 0071000	Violet	Reel	1,000 ft	612825358428
1865A 0091000	White	Reel	1,000 ft	612825358442
1865A 0041000	Yellow	Reel	1,000 ft	612825356769

Footnote:	C - CRATE REEL PUT-UP.
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History

Update and Revision:	Revision Number: 0.424 Revision Date: 04-29-2024
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