Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

1865A Coax - Sub-Miniature

For more Information 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:	120.101 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 Directive 2011/65/EU (ROHS II):	Yes
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

Suitability

Suitability - Indoor:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No

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:

Voltage
300 V RMS

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.

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5.000	850.000	21.000

850.000	3000.000	18.000

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	1,000 FT	16.000 LB	GREEN, MIL		#25 GIFHDPE SH FR PVC
1865A 0011000	1,000 FT	16.000 LB	BROWN	C	#25 GIFHDPE SH FR PVC
1865A 0021000	1,000 FT	16.000 LB	RED	C	#25 GIFHDPE SH FR PVC
1865A 0031000	1,000 FT	16.000 LB	ORANGE		#25 GIFHDPE SH FR PVC
1865A 0041000	1,000 FT	16.000 LB	YELLOW		#25 GIFHDPE SH FR PVC
1865A 0061000	1,000 FT	16.000 LB	BLUE, LIGHT	C	#25 GIFHDPE SH FR PVC
1865A 0071000	1,000 FT	16.000 LB	VIOLET	C	#25 GIFHDPE SH FR PVC
1865A 0081000	1,000 FT	16.000 LB	GRAY		#25 GIFHDPE SH FR PVC
1865A 0091000	1,000 FT	16.000 LB	WHITE	C	#25 GIFHDPE SH FR PVC
1865A 0101000	1,000 FT	16.000 LB	BLACK	C	#25 GIFHDPE SH FR PVC

Notes:
C = CRATE REEL PUT-UP.

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