



Description:

23 AWG solid .023" 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. (in.)
1	23	Solid	BC - Bare Copper	.023

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.102

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 Cabling

Overall Nominal Diameter: 0.159 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +75°C

UL Temperature Rating: 75°C

Bulk Cable Weight: 18 lbs/1000 ft.

Max. Recommended Pulling Tension: 36 lbs.

Min. Bend Radius (Install)/Minor Axis: 1.500 in.

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

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

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

75

Nom. Inductance:

Inductance (µH/ft)

.107

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

16.3

Nominal Velocity of Propagation:

VP (%)

82

Nominal Delay:

Delay (ns/ft)

1.22

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

20.1

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

7.6

Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100 ft.)

1	.39
3.58	.78
5	.92
7	1.08
10	1.20
67.5	2.83
71.5	3.06
88.5	3.16
100	3.33
135	3.81
143	3.92
180	4.38
270	5.40
360	6.20
540	7.70
720	9.47

750	9.59
1000	10.5
1500	13.0
2000	15.1
2250	16.0
3000	18.5
4500	22.8

Max. Operating Voltage - UL:

Voltage
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	1600	23
1601	4500	21

Sweep Test

Sweep Testing: 100% Sweep tested 5 MHz to 4.5 GHz.

Misc. Information (Overall)

Other Description: 02/11/05 BAG: Changed to 82% VP per long term capability. 3-29-05 BAG: Added 4.5 GHz RL Testing. 06/27/05 BAG: Added 4.5 GHz Atten

Notes (Overall)

Notes: Also available in multiples, bundled. See 7787A through 7792A.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1855A N3U1000	1,000 FT	17.000 LB	GREEN, MIL	C	#23 PE/GIFHDPE SH FR PVC
1855A 0011000	1,000 FT	17.000 LB	BROWN	C	#23 PE/GIFHDPE SH FR PVC
1855A 0021000	1,000 FT	17.000 LB	RED	C	#23 PE/GIFHDPE SH FR PVC
1855A 0031000	1,000 FT	17.000 LB	ORANGE	C	#23 PE/GIFHDPE SH FR PVC
1855A 0041000	1,000 FT	17.000 LB	YELLOW	C	#23 PE/GIFHDPE SH FR PVC
1855A 0061000	1,000 FT	17.000 LB	BLUE, LIGHT	C	#23 PE/GIFHDPE SH FR PVC
1855A 0071000	1,000 FT	17.000 LB	VIOLET	C	#23 PE/GIFHDPE SH FR PVC
1855A 0081000	1,000 FT	17.000 LB	GRAY	C	#23 PE/GIFHDPE SH FR PVC
1855A 0091000	1,000 FT	17.000 LB	WHITE	C	#23 PE/GIFHDPE SH FR PVC
1855A 0101000	1,000 FT	17.000 LB	BLACK	C	#23 PE/GIFHDPE SH FR PVC
1855A 010500	500 FT	9.500 LB	BLACK		#23 PE/GIFHDPE SH FR PVC

Notes:
C = CRATE REEL PUT-UP.

Precision Video Cable for Analog and Digital

Sub-Miniature RG-59/U Type



Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m

25 AWG Stranded (19x37) .021" Bare Copper Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)*

75°C	1865A	NEC: CMR CEC: CMG FT4	1000	304.8	14.0	6.4	25 AWG (19x37) .021" BC 27.4Ω/M' 89.9Ω/km	.094	2.39	Duofoil + 95% TC Braid 5.4Ω/M' 17.7Ω/km	.150	3.81	75	82%	16.5	54.1	1	.5	1.5
																	3.6	1.0	3.1
																	10	1.6	5.2
																	71.5	3.7	12.1
																	135	5.0	16.4
																	270	7.1	23.3
																	360	8.2	26.9
																	540	10.1	33.1
																	720	11.8	38.7
																	750	12.0	39.4
																	1000	13.9	45.6
																	1500	17.0	55.8
																	2250	20.8	68.2
																	3000	24.0	78.7

23 AWG Solid .023" Bare Copper Conductor • Duofoil (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)*

SDI/HDTV Digital Video 75°C	1855A	NEC: CMR CEC: CMG FT4	500 [▲]	152.4	9.0	4.1	23 AWG (solid) .023" BC 20.1Ω/M' 65.9Ω/km	.102	2.59	Duofoil + 95% TC Braid 7.6Ω/M' 24.9Ω/km	.159	4.03	75	82%	16.3	53.5	1	.4	1.3
																	3.6	.8	2.6
																	10	1.2	3.9
																	71.5	3.1	10.0
																	135	3.8	12.5
																	270	5.4	17.7
																	360	6.2	20.3
																	540	7.7	25.3
																	720	9.5	31.1
																	750	9.6	31.5
																	1000	10.5	34.4
																	1500	13.0	42.6
																	2250	16.0	52.5
																	3000	18.5	60.7

*500 ft. put-up available in Black only.

BC = Bare Copper • DCR = DC Resistance • HDPE = Foam High-density Polyethylene • TC = Tinned Copper

*Available in Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White or Black.