



Description:

23 AWG Solid .023" bare copper-covered steel conductor, plenum, FEP insulation, bare copper braid shield (97% coverage), FEP jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	23	Solid	BCCS - Bare Copper Covered Steel	.023

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
FEP - Fluorinated Ethylene Propylene	.132

Outer Shield

Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Braid	BC - Bare Copper	97

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
FEP - Fluorinated Ethylene Propylene

Overall Cabling

Overall Nominal Diameter: 0.190 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -70°C To +200°C

Non-UL Temperature Rating: 200°C

Bulk Cable Weight: 37 lbs/1000 ft.

Max. Recommended Pulling Tension: 62 lbs.

Min. Bend Radius (Install)/Minor Axis: 2.500 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

EU CE Mark: No

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 04/01/2005

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:	59/U

Flame Test

UL Flame Test:	NFPA 262
C(UL) Flame Test:	FT6

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Burial:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	8241

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (µH/ft)
.126

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
19.5

Nominal Velocity of Propagation:

VP (%)
69.5

Nominal Delay:

Delay (ns/ft)
1.45

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
49.0

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
2.6

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	.5
10	1.0
50	2.3
100	3.3
200	5.2
400	8.4
700	11.6
900	13.8
1000	14.8

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Operating Voltage - Non-UL:

Voltage
1700 V RMS

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
88241 0101000	1,000 FT	36.000 LB	BLACK	C	23 SH FEP RG-59/U COAX
88241 010500	500 FT	18.000 LB	BLACK	C	23 SH FEP RG-59/U COAX

Notes:

C = CRATE REEL PUT-UP.

Standard Analog Video Cable

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

23 AWG Solid .023" Bare Copper or Bare Copper-covered Steel Conductor (see below) • Bare Copper Braid Shield (95% Coverage)

Polyethylene Insulation • Black PVC Jacket

UL AWM Style 1354 (30V 75°C) VW-1	8241	NEC: CM	100	30.5	4.4	2.0	23 AWG (solid) .023"	.146	3.71	BC Braid 95% Shield Coverage	.240	6.10	75	66%	20.5	67.3	1	.6	2.0
			U-500	U-152.4	19.5	8.9											10	1.1	3.6
			500	152.4	18.5	8.4											50	2.4	7.9
			U-1000 [†]	U-304.8	38.0	17.2	BCCS			2.6Ω/M'							100	3.4	11.2
			1000	304.8	40.0	18.1	49.0Ω/M'			8.5Ω/km							200	4.9	16.1
			2000	609.6	80.0	36.3	160.7Ω/km										400	7.0	23.0
			5000	1524.0	200.0	90.7											700	9.7	31.8
																	900	11.1	36.4
																	1000	12.0	39.4

[†]U-1000 ft. put-up also available in Red, Yellow, Green, Lt. Blue, White or Orange.

Flame-retardant Semi-foam Polyethylene Insulation • Black PVC Jacket

UL AWM Style 1354 (30V 75°C)	8241A	NEC: CMG CEC: CMG FT4	U-1000	U-304.8	40.0	18.1	23 AWG (solid) .023"	.146	3.71	BC Braid 95% Shield Coverage	.242	6.15	75	66%	20.5	67.3	1	.6	2.0
			1000	304.8	42.0	19.1											5	.9	3.0
							BCCS			2.6Ω/M'							10	1.1	3.6
							49.0Ω/M'			8.5Ω/km							50	2.4	7.9
							160.7Ω/km										100	3.4	11.2
																	200	4.9	16.1
																	400	7.0	23.0
																	700	10.1	33.1
																	900	11.7	38.4
																	1000	13.2	43.3

Suitable for Indoor and Outdoor applications.

Polyethylene Insulation • Black PVC Jacket

UL AWM Style 1354 (30V 80°C)	8241B	NEC: CM CEC: CM	U-1000	U-304.8	36.0	16.3	23 AWG (solid) .023"	.146	3.71	BC Braid 95% Shield Coverage	.242	6.15	75	66%	20.5	67.3	1	.4	1.3
			1000	304.8	37.0	16.8											10	1.1	3.6
							BC			2.9Ω/M'							50	2.4	7.9
							20.4Ω/M'			9.5Ω/km							100	3.4	11.2
							66.9Ω/km										200	4.9	16.1
																	400	7.0	23.0
																	700	9.7	31.8
																	900	11.1	36.4
																	1000	12.0	39.4

Suitable for Indoor and Outdoor applications.

22 AWG Stranded (7x30) .030" Bare Copper Conductor • Bare Copper Braid Shield (95% Coverage)

Foam Polyethylene Insulation • PVC Jacket (Available in Matte Black, Red, Blue, Green, White, Gray or Yellow)

High-Flex 60°C	8241F	—	1000	304.8	35.0	15.9	22 AWG (7x30) .030"	.146	3.71	BC Braid 95% Shield Coverage	.242	6.15	75	78%	17.3	56.8	1	.3	1.0
																	10	.9	3.0
							BC			2.6Ω/M'							50	2.1	6.9
							15.0Ω/M'			8.5Ω/km							100	3.0	9.8
							49.2Ω/km										200	4.5	14.8
																	400	6.6	21.7
																	700	8.9	29.2
																	900	10.1	33.1
																	1000	10.9	35.8

23 AWG Solid .023" Bare Copper-covered Steel Conductor • Bare Copper Braid Shield (97% Coverage)

Plenum • FEP Insulation • Black FEP Jacket

200°C	88241	NEC: CMP CEC: CMP FT6	500 [†]	152.4	18.0	8.2	23 AWG (solid) .023"	.132	3.35	BC Braid 97% Shield Coverage	.190	4.83	75	69.5%	19.5	64.0	1	.5	1.6
			1000 [†]	304.8	36.0	16.3											10	1.0	3.3
							BCCS			2.6Ω/M'							50	2.3	7.5
							49.0Ω/M'			8.5Ω/km							100	3.3	10.8
							160.7Ω/km										200	5.2	17.1
																	400	8.4	27.6
																	700	11.6	38.0
																	900	13.8	45.3
																	1000	14.8	48.6

Suitable for Outdoor and Direct Burial applications.

Plenum • FEP Insulation • Natural Flammarrest® Jacket

75°C	82241	NEC: CMP CEC: CMP FT6	U-500 [†]	U-152.4	18.5	8.4	23 AWG (solid) .023"	.134	3.35	BC Braid 97% Shield Coverage	.190	4.83	75	69.5%	19.5	64.0	1	.5	1.6
			U-1000 [†]	U-304.8	36.0	16.3											10	1.0	3.3
			1000 [†]	304.8	34.0	15.4											50	2.3	7.5
							BCCS			2.6Ω/M'							100	3.3	10.8
							49.0Ω/M'			8.5Ω/km							200	5.2	17.1
							160.7Ω/km										400	8.4	27.6
																	700	11.6	38.0
																	900	13.8	45.3
																	1000	14.8	48.6

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene

[†]Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.