

Description:

23 AWG Solid .023" bare copper or bare copper-covered steel conductor, polyethylene insulation, bare copper braid shield (95% coverage), PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	23	Solid	BCCS - Bare Copper Covered Steel	0.023

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
PE - Polyethylene	.146

Outer Shield

Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Braid	BC - Bare Copper	95

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cabling

Overall Nominal Diameter: 0.240 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +75°C

UL Temperature Rating: 75°C

Non-UL Temperature Rating: 75°C

Bulk Cable Weight: 36 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: CM

AWM Specification: UL Style 1354

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:	59/U

Flame Test

UL Flame Test:	UL1685 UL Loading
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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
Plenum Number:	88241, 82241

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (µH/ft)
.131

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
20.5

Nominal Velocity of Propagation:

VP (%)
66

Nominal Delay:

Delay (ns/ft)
1.54

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	.6
10	1.1
50	2.4
100	3.4
200	4.9
400	7.0
700	9.7
900	11.1
1000	12.0

Nom. Power Rating:

Freq. (MHz)	Rating (W)
50	470
100	310

300	160
500	115
1000	76

Max. Operating Voltage - UL:

Voltage
300 V RMS
30 V RMS

Max. Operating Voltage - Non-UL:

Voltage
1700 V RMS

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8241 002U1000	1,000 FT	38.000 LB	RED		RG59/U TYPE COAX RED
8241 003U1000	1,000 FT	38.000 LB	ORANGE		RG59/U TYPE COAX ORG
8241 004U1000	1,000 FT	38.000 LB	YELLOW		RG59/U TYPE COAX YEL
8241 005U1000	1,000 FT	38.000 LB	GREEN, DARK		RG59/U TYPE COAX DGRN
8241 006U1000	1,000 FT	38.000 LB	BLUE, LIGHT		RG59/U TYPE COAX LBLU
8241 009U1000	1,000 FT	38.000 LB	WHITE		RG59/U TYPE COAX WHT
8241 010U1000	1,000 FT	38.000 LB	BLACK		RG59/U TYPE COAX BLK
8241 010U500	500 FT	19.500 LB	BLACK		RG59/U TYPE COAX BLK
8241 010100	100 FT	4.400 LB	BLACK		RG59/U TYPE COAX BLK
8241 0101000	1,000 FT	40.000 LB	BLACK	C	RG59/U TYPE COAX BLK
8241 0102000	2,000 FT	80.000 LB	BLACK	C	RG59/U TYPE COAX BLK
8241 010500	500 FT	18.500 LB	BLACK	C	RG59/U TYPE COAX BLK
8241 0105000	5,000 FT	200.000 LB	BLACK	C	RG59/U TYPE COAX BLK

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)	.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	.023"										10	1.1	3.6
			500	152.4	18.5	8.4	.023"			2.6Ω/M'							50	2.4	7.9
			U-1000 [†]	U-304.8	38.0	17.2	BCCS			8.5Ω/km							100	3.4	11.2
			1000	304.8	40.0	18.1	49.0Ω/M'										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

For Plenum versions of 8241, see 88241 or 82241.



[†]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)	.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	.023"										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

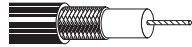
UL AWM Style 1354 (30V 80°C)	8241B	NEC: CM CEC: CM	U-1000	U-304.8	36.0	16.3	23 AWG (solid)	.146	3.71	BC Braid 95% Shield Coverage	.242	6.15	75	66%	20.5	67.3	1	.4	1.3
			1000	304.8	37.0	16.8	.023"										10	1.1	3.6
							BC			2.9Ω/M'							50	2.4	7.9
							20.4Ω/M'			9.5Ω/km							100	3.4	11.2
							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)	.146	3.71	BC Braid 95% Shield Coverage	.242	6.15	75	78%	17.3	56.8	1	.3	1.0
							.030"										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)	.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	.023"										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

For Non-Plenum version of 88241, see 8241.

Suitable for Outdoor and Direct Burial applications.

Plenum • FEP Insulation • Natural Flamarrest® Jacket

75°C	82241	NEC: CMP CEC: CMP FT6	U-500 [†]	U-152.4	18.5	8.4	23 AWG (solid)	.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	.023"										10	1.0	3.3
			1000 [†]	304.8	34.0	15.4	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

For Non-Plenum version of 82241, see 8241.

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.