



Description:

22 AWG solid bare copper-covered steel conductor, foam polyethylene insulation, bare copper braid shield (85% coverage), PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	22	Solid	BCCS - Bare Copper Covered Steel	.025

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
FPE - Foam 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: 0.242 in.

Mechanical Characteristics (Overall)

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

Non-UL Temperature Rating: 75°C

Bulk Cable Weight: 32 lbs/1000 ft.

Max. Recommended Pulling Tension: 88 lbs.

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

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

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):	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

Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes

Suitability - Aerial: Yes - When supported by a messenger wire.

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
80

Nom. Inductance:

Inductance (µH/ft)
.104

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.3

Nominal Velocity of Propagation:

VP (%)
78

Nominal Delay:

Delay (ns/ft)
1.3

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
50

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
2.6

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	.44
10	.90
50	2.0
100	2.9
200	4.1
400	5.9
700	7.8
900	8.8
1000	9.9

Max. Operating Voltage - Non-UL:

Voltage
300 V RMS

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8221 010U1000	1,000 FT	36.000 LB	BLACK		RG59/U TYPE COAX
8221 010U500	500 FT	18.500 LB	BLACK		RG59/U TYPE COAX
8221 0101000	1,000 FT	37.000 LB	BLACK	C	RG59/U TYPE COAX
8221 010500	500 FT	17.000 LB	BLACK		RG59/U TYPE 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

22 AWG Solid Bare Copper-covered Steel Conductor • Bare Copper Braid Shield (95% Coverage)

Polyethylene Insulation • Black PVC Jacket

UL AWM	8263	NEC:	U-500	U-152.4	19.5	8.9	22 AWG	.146	3.71	BC Braid	.242	6.15	75	66%	20.5	67.3	1	.6	2.0
Style 1354		CMX:	U-1000	U-304.8	38.0	17.2	(solid)			95% Shield							10	1.1	3.6
(30V 60°C)		CEC:	1000	304.8	39.0	17.7	.023"			Coverage							50	2.4	7.9
		CMX:					BCCS			2.6Ω/M'							100	3.4	11.2
							49.0Ω/M'			8.5Ω/km							200	4.9	16.1
							160.7Ω/km										400	7.0	23.0
																	700	9.7	31.8
																	900	11.1	36.4
																	1000	12.0	39.4

Non-contaminating Black PVC Jacket. Suitable for Indoor and Outdoor applications.

Foam Polyethylene Insulation • Black PVC Jacket

75°C	8221	—	U-500	U-152.4	18.5	8.4	22 AWG	.146	3.71	BC Braid	.242	6.15	80	78%	16.3	53.5	1	.4	1.4
			500	152.4	17.0	7.7	(solid)			95% Shield							10	.9	3.0
			U-1000	U-304.8	36.0	16.3	.025"			Coverage							50	2.0	6.6
			1000	304.8	37.0	16.8	BCCS			2.6Ω/M'							100	2.9	9.5
							50.0Ω/M'			8.5Ω/km							200	4.1	13.5
							164.0Ω/km										400	5.9	19.4
																	700	7.8	25.6
																	900	8.8	28.9
																	1000	9.9	32.5

Suitable for Outdoor and Aerial applications when supported by a Messenger Wire.

22 AWG Solid Bare Copper-covered Steel Conductor • Bare Copper Braid Shield (85% Coverage)

Polyethylene Insulation • Black PVC Jacket

UL AWM	9244	NEC:	U-500	U-152.4	18.0	8.2	22 AWG	.146	3.71	BC Braid	.242	6.15	75	66%	19.4	63.6	1	.6	2.0
Style 1354		CMX:	U-1000	U-304.8	35.0	15.9	(solid)			85% Shield							10	1.1	3.6
(30V 80°C)		CEC:	1000	304.8	36.0	16.3	.025"			Coverage							50	2.4	7.9
		CMX:	3280	1000.0	118.1	53.8	BCCS			4.5Ω/M'							100	3.4	11.2
							50.0Ω/M'			14.8Ω/km							200	4.9	16.1
							164.0Ω/km										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 • Black PVC Jacket

UL AWM	9659	NEC:	U-500	U-152.4	19.0	8.6	22 AWG	.146	3.71	BC Braid	.242	6.15	75	78%	17.3	56.7	1	.3	1.0
Style 1354		CMX:	U-1000	U-304.8	37.0	16.8	(7x30)			95% Shield							10	.9	3.0
(30V 60°C)		CEC:	1000	304.8	38.0	17.2	.030"			Coverage							50	2.1	6.9
VW-1		CMX:					BC			2.6Ω/M'							100	3.0	9.8
							15.0Ω/M'			8.5Ω/km							200	4.5	14.8
							49.2Ω/km										400	6.6	21.7
																	700	8.9	29.2
																	900	10.1	33.1
																	1000	10.9	35.8

Non-contaminating PVC Jacket. For CCTV applications. Suitable for Indoor and Outdoor applications.

UL AWM	9259	NEC:	100	30.5	4.1	1.9	22 AWG	.146	3.71	BC Braid	.241	6.12	75	78%	17.3	56.7	1	.3	1.0
Style 1354		CM	U-500	U-152.4	18.0	8.2	(7x30)			95% Shield							10	.9	3.0
(30V 80°C)		CEC:	500	152.4	16.5	7.5	.030"			Coverage							50	2.1	6.9
		CM	U-1000	U-304.8	35.0	15.9	BC			2.6Ω/M'							100	3.0	9.8
			1000	304.8	37.0	16.8	15.0Ω/M'			8.5Ω/km							200	4.5	14.8
							49.2Ω/km										400	6.6	21.7
																	700	8.9	29.2
																	900	10.1	33.1
																	1000	10.9	35.8

For CCTV applications. Suitable for Indoor and Outdoor applications.

Plenum • Foam FEP Insulation • Black FEP Jacket

200°C	89259	NEC:	100†	30.5	5.1	2.3	22 AWG	.135	3.43	BC Braid	.193	4.90	75	78%	17.3	56.7	1	.3	1.0
		CMP	500†	152.4	16.0	7.3	(7x30)			95% Shield							10	.9	3.0
		CEC:	1000†	304.8	32.0	14.5	.030"			Coverage							50	2.1	6.9
		CMP FT6					BC			2.6Ω/M'							100	3.0	9.8
							15.0Ω/M'			8.5Ω/km							200	4.5	14.8
							49.2Ω/km										400	6.6	21.7
																	700	9.0	29.5
																	900	10.1	33.1
																	1000	11.0	36.1

Suitable for Outdoor and Direct Burial applications.

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

Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket

75°C	82259	NEC:	U-1000	U-304.8	31.0	14.1	22 AWG	.135	3.43	BC Braid	.193	4.90	75	78%	17.3	56.7	1	.3	1.0
		CMP	1000	304.8	30.0	13.6	(7x30)			95% Shield							10	.9	3.0
		CEC:					.030"			Coverage							50	2.1	6.9
		CMP FT6					BC			2.6Ω/M'							100	3.0	9.8
							15.0Ω/M'			8.5Ω/km							200	4.5	14.8
							49.2Ω/km										400	6.6	21.7
																	700	9.0	29.5
																	900	10.1	33.1
																	1000	11.0	36.1

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