



Description:

22 AWG solid bare copper-covered steel conductor, 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.)
PE - Polyethylene	.146

Outer Shield

Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Braid	BC - Bare Copper	85

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 +80°C

Non-UL Temperature Rating: 80°C

Bulk Cable Weight: 34 lbs/1000 ft.

Max. Recommended Pulling Tension: 67 lbs.

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

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMX

CEC/C(UL) Specification: CMX

AWM Specification: UL Style 1354 (30 V 80°C)

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:	VW-1
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Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No
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Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (μH/ft)
.112

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
19.4

Nominal Velocity of Propagation:

VP (%)
66

Nominal Delay:

Delay (ns/ft)
1.54

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
50

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.5

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
150 V RMS

Max. Operating Voltage - Non-UL:

Voltage
1700 V RMS

Minimum Return Loss:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
		5	450	23

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9244 010U1000	1,000 FT	35.000 LB	BLACK		RG-59/U TYPE COAX
9244 010U500	500 FT	18.000 LB	BLACK		RG-59/U TYPE COAX
9244 0101000	1,000 FT	36.000 LB	BLACK		RG-59/U TYPE COAX

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	
		CMX:	U-1000	U-304.8	35.0	15.9	(solid)			95% Shield								10	.9	3.0
		CEC:	1000	304.8	36.0	16.3	.025"			Coverage								50	2.0	6.6
		CMX	3280	1000.0	118.1	53.8	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.

Foam FEP Insulation • Black FEP Jacket																				
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

