



Description:

23 AWG stranded (7x32) .023" bare compacted copper conductor, polyethylene insulation, tinned copper braid shield (95% coverage), polyethylene jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	23	7x32	BCC - Bare Compacted Copper	.023

Insulation

Insulation Material:

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

Outer Shield

Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Braid	TC - Tinned Copper	95

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

Overall Cabling

Overall Nominal Diameter: 0.220 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -55°C To +80°C

Non-UL Temperature Rating: 80°C

Bulk Cable Weight: 26 lbs/1000 ft.

Max. Recommended Pulling Tension: 45 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: Mini 59/U

Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes

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

Suitability - Burial: Yes

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

75

Nom. Inductance:

Inductance (µH/ft)

.118

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

21.0

Nominal Velocity of Propagation:

VP (%)

66

Nominal Delay:

Delay (ns/ft)

1.54

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

19.1

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

4.5

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	.4
3.6	.6
10.0	1.2
71.5	3.3
135	4.7
270	6.8
360	8.0
540	9.9
720	11.6
750	11.9
1000	13.8

Max. Operating Voltage - Non-UL:

Voltage

2300 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.

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)
5.000	216.000	27.000
216.000	850.000	21.000

Sweep Test

Sweep Testing: 100% Sweep tested 5MHz to 850MHz.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8279 0101000	1,000 FT	29.000 LB	BLACK	C	MINI VIDEO CABLE
8279 010500	500 FT	13.000 LB	BLACK		MINI VIDEO CABLE

Notes:

C = CRATE REEL PUT-UP.

Precision Video Cable for Analog and Digital

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 Stranded (7x32) .023" Bare Compacted Copper* • Tinned Copper Braid Shield (95% Coverage)

Polyethylene Insulation • Black Polyethylene Jacket																			
80°C	8279	—	500	152.4	13.0	5.9	23 AWG (7x32)	.146	3.71	TC + 95% Shield	.220	5.59	75	66%	21.0	68.9	1	.4	1.1
			1000	304.8	29.0	13.2	.023" BCC			19.1Ω/M' / 62.6Ω/km							3.6	.6	2.0
										4.5Ω/M' / 14.8Ω/km							10.0	1.2	3.9
																	71.5	3.3	10.8
																	135	4.7	15.4
																	270	6.8	22.3
																	360	8.0	26.2
																	540	9.9	32.5
																	720	11.6	38.0
																	750	11.9	39.0
																	1000	13.8	45.3

23 AWG Solid .022" Bare Copper Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

Polyethylene Insulation • Black Polyethylene Jacket																			
80°C	9209	—	U-500	U-152.4	15.0	6.8	23 AWG (solid)	.146	3.71	Duofoil + 95% TC Braid	.220	5.59	75	66%	21.0	68.9	1	.4	1.2
			U-1000	U-304.8	29.0	13.2	.022" BC			4.5Ω/M' / 14.8Ω/km							3.6	.5	1.8
										20.4Ω/M' / 66.9Ω/km							10.0	1.2	3.8
																	71.5	2.9	9.5
																	135	4.0	13.0
																	270	5.6	18.4
																	360	6.6	21.5
																	540	8.3	27.2
																	720	9.7	31.7
																	750	9.9	32.5
																	1000	11.6	38.0

Flame-retardant Semi-foam Polyethylene Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 75°C)	9209A	NEC: CMR CEC: CMG FT4	U-1000	U-304.8	35.0	15.9	23 AWG (solid)	.146	3.71	Duofoil + 95% TC Braid	.220	5.59	75	66%	20.5	67.2	1	.4	1.2
							.022" BC			4.5Ω/M' / 14.8Ω/km							3.6	.5	1.8
										20.4Ω/M' / 66.9Ω/km							10.0	1.2	3.8
																	71.5	2.9	9.5
																	135	4.0	13.0
																	270	5.6	18.4
																	360	6.6	21.5
																	540	8.6	28.3
																	720	10.1	33.2
																	750	10.4	34.1
																	1000	12.8	41.9

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

*Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductor.