



Description:

18 AWG solid .040" bare copper conductor, plenum, foam FEP insulation, Duofoil® + tinned copper braid shield (65% coverage), FEP jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	18	Solid	BC - Bare Copper	.040

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
FFEP - Foam Fluorinated Ethylene Propylene	.170

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	65

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
FEP - Fluorinated Ethylene Propylene

Overall Cabling

Overall Nominal Diameter: 0.222 in.

Mechanical Characteristics (Overall)

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

Non-UL Temperature Rating: 200°C

Bulk Cable Weight: 35 lbs/1000 ft.

Max. Recommended Pulling Tension: 45 lbs.

Min. Bend Radius (Install)/Minor Axis: 3 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: 6/U

Flame Test

UL Flame Test: NFPA 262

CSA Flame Test: FT6

Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes

Suitability - Aerial: Yes

Plenum/Non-Plenum

Plenum (Y/N): Yes

Non-Plenum Number: 9248

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

75

Nom. Inductance:

Inductance (µH/ft)

.09

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

16.5

Nominal Velocity of Propagation:

VP (%)

82

Nominal Delay:

Delay (ns/ft)

1.24

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

6.4

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

5.1

Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100 ft.)

1	.3
10	.7
50	1.5
100	2.1
200	3.1
400	4.5
700	6.0
900	6.9
1000	7.3

Max. Operating Voltage - UL:

Voltage

300 V RMS

Minimum Return Loss:

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

Notes (Overall)

Notes: 100% Sweep tested 5 MHz to 450 MHz.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
89248 0101000	1,000 FT	33.000 LB	BLACK	C	#18 FFEP RG 6/U COAX
89248 0102000	2,000 FT	64.000 LB	BLACK	C	#18 FFEP RG 6/U COAX
89248 010500	500 FT	15.000 LB	BLACK	C	#18 FFEP RG 6/U COAX

Notes:

C = CRATE REEL PUT-UP.


Standard Analog Video Cable

RG-6/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

21 AWG Solid .028" Bare Copper-covered Steel Conductor • Double Bare Copper Braid Shields (98% Coverage)


Polyethylene Insulation • Black Polyethylene Jacket																			
MATV Cable 80°C	8215	—	1000	304.8	74.0	33.6	21 AWG (solid) .028"	.185	4.70	(2) BC Braids 98% Shield Coverage	.332	8.43	75	66%	20.5	67.2	1	.4	1.3
							32.0Ω/M'			1.1Ω/M'	100% Sweep tested. 5 MHz to 450 MHz.					10	.8	2.6	
							105.0Ω/km			3.6Ω/km							50	1.9	6.2
																	100	2.7	8.9
																	200	4.1	13.4
																	400	5.9	19.4
																	700	8.1	26.6
																	900	9.4	30.8
																	1000	9.8	32.1

18 AWG Solid .037" Bare Copper Conductor • Double Bare Copper Braid Shields (98% Coverage)


Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	9290	NEC: CM	1000	304.8	59.0	26.8	18 AWG (solid) .037"	.180	4.57	(2) BC Braids 98% Shield Coverage	.288	7.32	75	81%	17.3	56.7	1	.2	.7
		CEC: CM	2000	609.6	118.0	53.6	7.5Ω/M'			2.0Ω/M'	100% Sweep tested. 5 MHz to 450 MHz.					10	.7	2.3	
							24.6Ω/km			7.5Ω/km							50	1.7	5.6
																	100	2.5	8.2
																	200	3.6	11.8
																	400	5.3	17.4
																	700	7.2	23.6
																	900	8.3	27.2
																	1000	8.8	28.9

Suitable for Indoor and Outdoor applications.


18 AWG Solid .040" Bare Copper Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (65% Coverage)

Plenum • Foam FEP Insulation • Black FEP Jacket																			
200°C	89248	NEC: CMP	500†	152.4	15.0	6.8	18 AWG (solid) .040"	.170	4.32	Duofoil + 65% TC Braid	.222	5.64	75	82%	16.5	50.3	1	.3	1.0
		CEC: CMP FT6	1000†	304.8	33.0	15.0	6.4Ω/M'			5.1Ω/M'	100% Sweep tested. 5 MHz to 450 MHz.					10	.66	2.2	
			2000†	609.6	64.0	29.0	21.0Ω/km			16.7Ω/km							50	1.5	4.9
																	100	2.1	6.9
																	200	3.1	10.2
																	400	4.5	14.8
																	700	6.0	19.7
																	900	6.9	22.6
																	1000	7.3	23.9

Suitable for Outdoor and Direct Burial applications.

Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C	82248	NEC: CMP	U-1000†	U-304.8	29.0	13.2	18 AWG (solid) .040"	.170	4.32	Duofoil + 65% TC Braid	.222	5.64	75	82%	16.5	50.3	1	.3	1.0
		CEC: CMP FT6	1000†	304.8	31.0	14.1	6.4Ω/M'			5.1Ω/M'	100% Sweep tested. 5 MHz to 450 MHz.					10	.7	2.3	
							21.0Ω/km			16.7Ω/km							50	1.6	5.2
																	100	2.2	7.2
																	200	3.0	9.8
																	400	4.6	15.1
																	700	6.6	21.6
																	900	7.7	25.3
																	1000	8.2	26.9

18 AWG Solid .040" Bare Copper Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (60% Coverage)

Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 80°C)	9248	NEC: CM	U-500	U-152.4	16.5	7.5	18 AWG (solid) .040"	.180	4.57	Duofoil + 60% TC Braid	.270	6.86	75	82%	16.2	53.1	1	.3	1.0
		CEC: CM	U-1000	U-304.8	32.0	14.5	6.4Ω/M'			5.6Ω/M'	For Plenum versions of 9248, see 89248 or 82248.					10	.7	2.3	
			1000	304.8	33.0	15.0	18.4Ω/km			18.4Ω/km							50	1.5	4.9
			1640	500.0	55.8	25.3											100	2.0	6.6
			3280	1000.0	108.2	49.2											200	2.8	9.2
																	400	4.0	13.1
																	700	5.3	17.4
																	900	6.1	20.0
																	1000	6.5	21.3
																	1500	8.3	27.2

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • HDPE = High-density Polyethylene • TC = Tinned Copper • UTP = Unshielded Twisted Pair

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