



Description:

10 AWG solid .103" bare copper conductor, gas-injected foam HDPE insulation, Duobond II® + tinned copper braid shield (95% coverage), PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	10	Solid	BC - Bare Copper	.103

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.285

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cabling

Overall Nominal Diameter: 0.403 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 1354)
Bulk Cable Weight:	108.200 lbs/1000 ft.
Max. Recommended Pulling Tension:	247 lbs.
Min. Bend Radius (Install)/Minor Axis:	4 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMG
CEC/C(UL) Specification:	CMG
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: 8/U

Flame Test

UL Flame Test: UL1685 FT4 Loading

C(UL) Flame Test: FT4

Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes

Suitability - Aerial: Yes

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

50

Nom. Inductance:

Inductance (µH/ft)

.065

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

24.8

Nominal Velocity of Propagation:

VP (%)

82

Nominal Delay:

Delay (ns/ft)

1.24

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

1.2

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

1.1

Maximum VSWR:

Start Freq. (MHz)	Stop Freq. (MHz)	Max. VSWR
5.000	2250.000	1.43:1

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
5	.4
10	.5
50	1.0
100	1.4
200	1.8
400	2.6
700	3.6
900	4.1
1000	4.4

1500	5.5
1800	6.1
2000	6.5
2500	7.5
3000	8.3
4000	9.9

Max. Power Rating:

Freq. (MHz)	Rating (W)
5	4021
10	3217
50	1609
100	1149
200	894
400	619
700	447
900	393
1000	366
1500	293
1800	264
2000	248
2500	215
3000	194
4000	163

Max. Operating Voltage - UL:

Voltage
30 V RMS (UL AWM Style 1354)

Max. Operating Voltage - Non-UL:

Voltage
300 V RMS

Notes (Overall)

Notes: Low Loss

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9914 0101000	1,000 FT	114.000 LB	BLACK	C	RG-8/U TYPE COAX
9914 010500	500 FT	56.000 LB	BLACK	C	RG-8/U TYPE COAX

Notes:


C = CRATE REEL PUT-UP.

50 Ohm Transmission and Computer Cable


RG-8/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

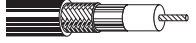
RG-8/U Type • 10 AWG Solid .108" Bare Copper Conductor • Duobond® II + Tinned Copper Braid Shield (90% Coverage)

Semi-solid Polyethylene Insulation • Black PVC Jacket																						
Low Loss 80°C 	9913	—	100	30.5	14.2	6.4	10 AWG	.286	7.26	Duobond II* + 90%	.405	10.29	50	84%	24.6	80.7	1	.3	1.0			
			250	76.2	31.8	14.4	(solid)											10	.5	1.7		
			500	152.4	57.0	25.9	.108"					TC Braid							50	1.0	3.3	
			1000	304.8	116.0	52.6	BC					1.8Ω/M'							100	1.4	4.6	
							.9Ω/M'					5.9Ω/km								200	1.8	6.0
							3.0Ω/km													400	2.6	8.5
															For Plenum version of 9913, see 89913.			700	3.6	11.8		
															900	4.1	13.5					
															1000	4.4	14.4					
															4000	9.5	31.1					

Suitable for Outdoor and Aerial applications.


Plenum • Semi-solid FEP Insulation • Black Fluorocopolymer Jacket																						
150°C 	89913	NEC: CMP CEC: CMP FT6	500†	152.4	63.0	28.6	10 AWG	.295	7.49	Duobond II* + 90%	.364	9.25	50	83%	25.0	82.0	1	.1	.3			
			1000†	304.8	128.0	58.2	(solid)												10	.4	1.3	
							.108"					TC Braid								50	1.0	3.3
							BC					1.8Ω/M'								100	1.6	5.2
							.9Ω/M'					5.9Ω/km								200	2.3	7.5
							3.0Ω/km													400	3.4	11.1
															700	5.0	16.4					
															900	6.0	19.7					
															1000	6.9	22.6					
															4000	17.0	55.8					

RG-8/U Type • 10 AWG Stranded (7x19) .108" Bare Copper Conductor • Duobond II + Tinned Copper Braid Shield (95% Coverage)

Gas-injected Foam HDPE Insulation • Matte Black Belflex® Jacket																							
Low Loss High-Flex 80°C 	9913F7	—	100	30.5	12.5	5.7	10 AWG	.285	7.24	Duobond II* + 95% TC	.405	10.29	52	85%	22.5	80.7	1	.4	1.3				
			250	76.2	27.8	12.6	(7x19)												10	.6	2.0		
			500	152.4	52.5	23.8	.108"					Braid								50	1.1	3.6	
			1000	304.8	104.0	47.2	BC					1.8Ω/M'								100	1.5	4.9	
							1.1Ω/M'					5.9Ω/km									200	2.0	6.6
							3.7Ω/km														400	3.0	9.8
															700	4.0	13.1						
															900	4.7	15.4						
															1000	5.0	16.4						
															4000	12.1	39.7						


Suitable for Outdoor and Aerial applications.

RG-8/U Type • 10 AWG Solid .103" Bare Copper Conductor • Duobond II + Tinned Copper Braid Shield (95% Coverage)

Gas-injected Foam HDPE Insulation • Black PVC Jacket																							
Low Loss UL AWM Style 1354 (30V 80°C) 	9914	NEC: CMG CEC: CMG FT4	500	152.4	56.0	25.4	10 AWG	.285	7.24	Duobond II* + 95%	.403	10.24	50	82%	24.8	81.4	1	.4	1.3				
			1000	304.8	114.0	51.7	(solid)													10	.5	1.7	
							.103"					TC Braid									50	1.0	3.3
							BC					1.1Ω/M'									100	1.4	4.6
							1.8Ω/M'					3.6Ω/km									200	1.8	6.0
							3.9Ω/km														400	2.6	8.5
															700	3.6	11.8						
															900	4.1	13.5						
															1000	4.4	14.4						
															4000	9.9	32.5						

Suitable for Outdoor and Aerial applications.

RG-8/U Type • 10 AWG Solid .108" Bare Copper Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (90% Coverage)

Plenum • Foam FEP Insulation • Black Fluorocopolymer Jacket																							
Low Loss 125°C 	7733A	NEC: CMP CEC: CMP FT6	500	152.4	53.5	24.3	10 AWG	.280	7.11	Duofoil + 90%	.355	9.01	50	84%	24.2	79.4	1	.1	.3				
			1000	304.8	105.0	47.7	(solid)													10	.4	1.3	
							.108"					TC Braid									50	1.1	3.6
							BC					1.8Ω/M'									100	1.5	4.9
							.9Ω/M'					5.9Ω/km									200	2.1	6.9
							3.0Ω/km														400	3.2	10.5
															700	4.5	14.8						
															900	5.7	18.7						
															1000	5.9	19.4						
															4000	14.1	46.3						

Suitable for Outdoor and Aerial applications.

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • HDPE = High-density Polyethylene • TC = Tinned Copper

*Duobond II = Bonded Duofoil (100% coverage) + aluminum braid (67% coverage).
†Spools are one piece, but length may vary ±10% from length shown.