Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

8233 Coax - RG-11/U Type

Description:

14 AWG solid .064" bare copper conductor, gas-injected foam HDPE insulation, bare copper double shields (95% coverage), polyethylene jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	14	Solid	BC - Bare Copper	.064

Insulation

Insulation Material:

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

Inner Shield

Inner Shield Material:

Type	Inner Shield Material	Coverage (%)
Braid	BC - Bare Copper	95

Inner Jacket

Inner Jacket Material:

Inner Jacket Material	Nom. Dia. (in.)
PE - Polyethylene	.365

Outer Shield

Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Braid	BC - Bare Copper	80

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

Overall Cabling

Overall Nominal Diameter:	0.475 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-55°C To +80°C
Non-UL Temperature Rating:	80°C
Bulk Cable Weight:	112 lbs/1000 ft.
Max. Recommended Pulling Tension:	170 lbs.
Min. Bend Radius (Install)/Minor Axis:	10 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:	11/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)
0.097

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.1

Nominal Velocity of Propagation:

VP (%)
84

Nominal Delay:

Delay (ns/ft)
1.20

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
2.5

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
1.6

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
1.4

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	.2
3.6	.3
10	.4
71.5	1.1
135	1.5
270	2.3
360	2.7

540	3.5
720	4.2
750	4.3
1000	5.2
1500	7.1
2250	9.6
3000	12.0

Max. Operating Voltage - Non-UL:

Voltage
300 V RMS

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5	850	21
851	3000	15

Sweep Test

Sweep Testing: 100% Sweep tested 5 MHz to 3 GHz.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8233 0101000	1,000 FT	122.000 LB	BLACK	C	RG-11/U TYPE TRIAX
8233 0102000	2,000 FT	240.000 LB	BLACK	C	RG-11/U TYPE TRIAX
8233 010500	500 FT	63.000 LB	BLACK	C	RG-11/U TYPE TRIAX

Notes:
C = CRATE REEL PUT-UP.

Video Triax Cable

RG-11/U Type

BRILLIANCE®

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

14 AWG Solid .064″ Bare Copper Conductor • Double Bare Copper Braid Shield (95% Coverage)

Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket (Polyethylene Insulation between Braids)

80°C	**8233**	—	500	152.4	63.0	28.6	14 AWG (solid) .064″ BC 2.5Ω/M′ 8.2Ω/km	.285	7.24	(2) BC Braids 95% Coverage Inner: 1.6Ω/M′ 5.3Ω/km Outer: 1.4Ω/M′ 4.6Ω/km	.475	12.07	75	84%	16.1	52.8	1	.2	.7
			1000	304.8	122.0	55.5											3.6	.3	1.0
			2000	609.6	240.0	109.1											10	.4	1.3
																	71.5	1.1	3.6
																	135	1.5	4.9
																	270	2.3	7.5
																	360	2.7	8.9
											100% Sweep tested. 5 MHz to 3 GHz.						540	3.5	11.5
																	720	4.2	13.8
																	750	4.3	14.1
																	1000	5.2	17.1
																	1500	7.1	23.3
																	2250	9.6	31.5
Suitable for Outdoor and Direct Burial applications and Aerial when supported by a Messenger wire.																	3000	12.0	39.4

Gas-injected Foam HDPE Insulation • Black PVC Jacket (PVC Insulation between Braids)

75°C	**8233A**	NEC: CMR	1000	304.8	136.0	61.7	14 AWG (solid) .064″ BC 2.5Ω/M′ 8.2Ω/km	.285	7.24	(2) BC Braids 95% Coverage Inner: 1.6Ω/M′ 5.3Ω/km Outer: 1.4Ω/M′ 4.6Ω/km	.475	12.07	75	84%	16.1	52.8	1	.2	.7
			2000	609.6	266.0	120.7											3.6	.3	1.0
		CEC: CMG FT4	4000†	1219.2	572.0	259.5											10	.4	1.3
																	71.5	1.1	3.6
																	135	1.5	4.9
																	270	2.3	7.5
																	360	2.7	8.9
											100% Sweep tested. 5 MHz to 3 GHz.						540	3.5	11.5
																	720	4.2	13.8
																	750	4.3	14.1
																	1000	5.2	17.1
																	1500	7.1	23.3
																	2250	9.6	31.5
Suitable for Aerial applications when supported by a Messenger wire and for Outdoor applications.																	3000	12.0	39.4

Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket (PE Insulation between Braids; Flooding Compound on Outer Braid)

Flooded 80°C	**7803A**	—	500	152.4	64.0	29.1	14 AWG (solid) .064″ BC 2.5Ω/M′ 8.2Ω/km	.285	7.24	(2) BC Braids 95% Coverage Inner: 1.6Ω/M′ 5.2Ω/km Outer: 1.4Ω/M′ 4.6Ω/km	.475	12.07	75	84%	16.1	52.8	1	.2	.7
			1000	304.8	123.0	55.9											3.6	.3	1.0
			3000	914.4	381.0	173.2											10	.4	1.3
																	71.5	1.1	3.6
																	135	1.5	4.9
																	270	2.3	7.5
																	360	2.7	8.9
											100% Sweep tested. 5 MHz to 3 GHz.						540	3.5	11.5
																	720	4.2	13.8
																	750	4.3	14.1
																	1000	5.2	17.1
																	1500	7.1	23.3
																	2250	9.6	31.5
Suitable for Outdoor and Direct Burial applications and Aerial applications when supported by a Messenger wire.																	3000	12.0	39.4

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • PE = Polyethylene

†Final put-up may vary ±10% from length shown.