


Product: [84303](#) 



50 Ohm Coax, RG303, 19 AWG Solid SCCCS, SCC Braid, FEP Jacket, CL2P

Product Description

RG-303/U, 19 AWG solid .037" silver-coated copper-covered steel conductor, plenum, TFE insulation, silver-coated copper braid shield (95% coverage), FEP jacket, commercial non-QPL product.

Technical Specifications

Product Overview

Environmental Space:	Outdoor - Aerial
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
19	Solid	SCCCS - Silver Coated Copper Covered Steel	0.037 in	1

Conductor Count:	1
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Insulation

Material	Material Trade Name	Nominal Diameter
TFE - Tetrafluoroethylene	Teflon®	0.116 in

Outer Shield Material

Type	Layer	Material	Coverage [%]
Braid	1	SCC - Silver-coated Copper	95 %

Outer Jacket Material

Material	Nominal Diameter
FEP - Fluorinated Ethylene Propylene	0.17 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Conductor DCR	Conductor Resistance	Nominal Outer Shield DCR	Outer Conductor DCR
16.3 Ohm/1000ft	16.3 Ohm/1000ft		4.3 Ohm/1000ft	4.3 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
29 pF/ft

Inductance

Nominal Inductance
0.067 µH/ft

Impedance

Nominal Characteristic Impedance
50 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
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1 MHz	0.3 dB/100ft
10 MHz	1.1 dB/100ft
50 MHz	2.7 dB/100ft
100 MHz	3.9 dB/100ft
200 MHz	5.6 dB/100ft
400 MHz	8.2 dB/100ft
700 MHz	11 dB/100ft
900 MHz	12.5 dB/100ft
1000 MHz	13.5 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.46 ns/ft	69.5 %

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)
50 MHz	2.7 dB/100ft
400 MHz	8.6 dB/100ft
1000 MHz	15 dB/100ft
3000 MHz	28 dB/100ft

Voltage

Description	UL Voltage Rating	Voltage Rating [V]
MIL	150 V RMS	1400 V RMS (Mil Spec)

VSWR

Frequency [MHz]	Max. VSWR
50 MHz - 1000 MHz	per M17/111-RG303

Temperature Range

UL Temp Rating:	200°C
Operating Temp Range:	-70°C To +200°C

Mechanical Characteristics

Bulk Cable Weight:	30 lbs/1000ft
Max Recommended Pulling Tension:	112 lbs
Min Bend Radius/Minor Axis:	2 in

Standards

NEC/(UL) Specification:	CL2P
RG Type:	303/U Type
Military Specification:	Commercial, non-QPL product (M17/111-RG303)
QPL (Qualified Parts List):	No

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	Yes - When supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	No

Flammability, LSOH, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
UL voltage rating:	150 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Part Number

Variants

Item #	Color	UPC	Length	Footnote
84303 0011000	Brown	612825206996	1,000 ft	C E
84303 001500	Brown	612825207009	500 ft	C E

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	E - MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'.

History

Update and Revision:	Revision Number: 0.264 Revision Date: 08-22-2019
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