



Part Number: 9913

Low Loss 50 Ohm, RG8, #10

Product Description

10 AWG solid .108" bare copper conductor, semi-solid polyethylene insulation, Duobond® II, tinned copper braid shield (90% coverage), PVC jacket.

Technical Specifications

Product Overview

Environmental Space:	Indoor (Not Riser or Plenum)
Suitable Applications:	Low Loss RG-8 50 Ohm Wireless & Antenna

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
10	Solid	BC - Bare Copper	0.108 in	1

Conductor Count:	1
Conductor Size:	10 AWG

Insulation

Material	Nominal Diameter
Semi-Solid PE - Semi-Solid Polyethylene	0.286 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Bonded Duofoil®	100 %
Braid	2	TC - Tinned Copper		90 %

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.405 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR	Outer Conductor DCR
0.9 Ohm/1000ft	1.8 Ohm/1000ft	1.8 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
24.6 pF/ft

Inductance

Nominal Inductance
0.059 µH/ft

Impedance

Nominal Characteristic Impedance
50 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
5 MHz	0.4 dB/100ft
10 MHz	0.5 dB/100ft
50 MHz	1 dB/100ft
100 MHz	1.4 dB/100ft
200 MHz	1.8 dB/100ft
400 MHz	2.6 dB/100ft
700 MHz	3.6 dB/100ft
900 MHz	4.1 dB/100ft
1000 MHz	4.4 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.2 ns/ft	84 %

Power Rating

Frequency [MHz]	Max. Power Rating [W]
5 MHz	4,021 W
10 MHz	3,217 W
50 MHz	1,609 W
100 MHz	1,149 W
200 MHz	894 W
400 MHz	619 W
700 MHz	447 W
900 MHz	393 W
1,000 MHz	366 W

Voltage

Non-UL Voltage Rating
600 V RMS

Temperature Range

Non-UL Temp Rating:	75°C
Operating Temp Range:	-40°C To +80°C

Mechanical Characteristics

Bulk Cable Weight:	107 lbs/1000ft
Max Recommended Pulling Tension:	300 lbs
Min Bend Radius/Minor Axis:	4 in

Standards

CPR Euroclass:	Eca
RG Type:	8/U Type

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	89913

Part Number

Variants

Item #	Color	Footnote
9913 010100	Black	C
9913 0101000	Black	C
9913 010250	Black	C
9913 010500	Black	C
9913 0105000	Black	C

Footnote:	C - CRATE REEL PUT-UP.
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Product Notes

Notes:	Recommend use of 7810R, 7810A, 9913F7, or 9914 for applications above 1 GHz.
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