

Product: [89913](#) 

Low Loss 50 Ohm, RG8, #10, CMP



Product Description

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

Technical Specifications

Physical Characteristics (Overall)

Conductor

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

Conductor Count:1

Insulation

Material	Nominal Diameter
FEP - Fluorinated Ethylene-Propylene (Semi-Solid)	0.292 in

Outer Shield Material

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

Outer Jacket Material

Material	Nominal Diameter
PVDF - Polyvinylidene Fluoride	0.36 in

Electrical Characteristics

Conductor DCR

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

Capacitance

Nom. Capacitance Conductor to Shield
25 pF/ft

Impedance

Nominal Characteristic Impedance
50 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.1 dB/100ft
10 MHz	0.4 dB/100ft
50 MHz	1 dB/100ft
100 MHz	1.6 dB/100ft

200 MHz	2.3 dB/100ft
400 MHz	3.4 dB/100ft
700 MHz	5 dB/100ft
900 MHz	6 dB/100ft
1000 MHz	6.9 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.2 ns/ft	83 %

Voltage

Non-UL Voltage Rating
300 V RMS

Temperature Range

UL Temp Rating:	150°C
Operating Temp Range:	-20°C To +150°C

Mechanical Characteristics

Bulk Cable Weight:	119 lbs/1000ft
Max Recommended Pulling Tension:	174 lbs
Min Bend Radius/Minor Axis:	6 in

Standards

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
RG Type:	8/U Type

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Plenum
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
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
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Flammability, LSOH, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Part Number

Non-Plenum Number:	9913
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Variants

Item #	Color	Putup Type	Length	UPC
89913 010500	Black	Reel	500 ft	612825223870
89913 0101000	Black	Reel	1,000 ft	612825221463

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

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Notes:	Recommend use of 7733A for applications above 1 GHz.
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History

Update and Revision:	Revision Number: 0.297 Revision Date: 04-28-2020
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