



Part Number: 1506A

Serial Digital Coax, RG59, 20 AWG Solid BC, Duofoil® + 95% TC Braid, CMP

Product Description

Low Loss Serial Digital Coax, Plenum-CMP, RG59 20 AWG solid bare copper conductor, foam FEP core, Duofoil®+95% tinned copper braid, Flammarrest® jacket

Technical Specifications

Product Overview

Environmental Space:	Indoor - Plenum
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
20	Solid	BC - Bare Copper	0.032 in	1

Conductor Count:	1
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Insulation

Material	Material Trade Name	Nominal Diameter
FFEP - Foam Fluorinated Ethylene Propylene	Teflon®	0.133 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Duofoil®	100 %
Braid	2	TC - Tinned Copper		95 %

Outer Jacket Material

Material	Material Trade Name	Nominal Diameter
PVC - Polyvinyl Chloride	Flammarrest®	0.196 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
10 Ohm/1000ft	3.2 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
16.1 pF/ft

Inductance

Nominal Inductance
0.097 µH/ft

Impedance

Nominal Characteristic Impedance
75 Ohm

Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5 - 1600 MHz	23 dB
1600 - 4500 MHz	21 dB
4500 - 6000 MHz	15 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.29 dB/100ft
3.58 MHz	0.62 dB/100ft
5 MHz	0.7 dB/100ft
7 MHz	0.82 dB/100ft
10 MHz	1.05 dB/100ft
67.5 MHz	2.2 dB/100ft
71.5 MHz	2.25 dB/100ft
100 MHz	2.7 dB/100ft
135 MHz	3.2 dB/100ft
143 MHz	3.25 dB/100ft
180 MHz	3.65 dB/100ft
270 MHz	4.55 dB/100ft
360 MHz	5.25 dB/100ft
540 MHz	6.4 dB/100ft
720 MHz	7.3 dB/100ft
750 MHz	7.5 dB/100ft
1000 MHz	9.4 dB/100ft
1500 MHz	11.3 dB/100ft
2250 MHz	14.4 dB/100ft
3000 MHz	17.2 dB/100ft
4500 MHz	21.8 dB/100ft
6000 MHz	25.9 dB/100ft

Delay

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

Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes:	Return Loss: Fixed bridge and termination
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Temperature Range

UL Temp Rating:	75°C
Operating Temp Range:	-20°C To +75°C

Mechanical Characteristics

UV Resistance:	No
Bulk Cable Weight:	29 lbs/1000ft
Max Recommended Pulling Tension:	68 lbs
Min Bend Radius/Minor Axis:	2 in

Standards

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
CPR Euroclass:	Eca
RG Type:	59/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):	2005-04-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MIL Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Sunlight Resistance:	No

Flammability, LSOH, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Part Number

Non-Plenum Number:	1505A
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Variants

Item #	Color	UPC	Length	Footnote
1506A 0101000	Black	612825116653	1,000 ft	C
1506A 010500	Black	612825116660	500 ft	C Z
1506A 0105000	Black	612825435877	5,000 ft	
1506A 0061000	Blue, Light	612825116622	1,000 ft	C Z
1506A 0065000	Blue, Light	612825435914	5,000 ft	
1506A 0011000	Brown	612825116585	1,000 ft	C Z
1506A 0081000	Gray	612825116646	1,000 ft	Z
1506A 0085000	Gray	612825435938	5,000 ft	
1506A N3U1000	Green, Mil	612825116578	1,000 ft	C Z
1506A 8771000	Natural	612825116677	1,000 ft	C
1506A 877500	Natural	612825116684	500 ft	C Z
1506A 8775000	Natural	612825435884	5,000 ft	
1506A 0031000	Orange	612825116608	1,000 ft	Z
1506A 0021000	Red	612825116592	1,000 ft	C Z
1506A 0025000	Red	612825435891	5,000 ft	
1506A 0071000	Violet	612825116639	1,000 ft	C Z
1506A 0075000	Violet	612825435921	5,000 ft	
1506A 0095000	White	612825435945	5,000 ft	
1506A 0041000	Yellow	612825116615	1,000 ft	Z
1506A 0045000	Yellow	612825435907	5,000 ft	

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

Product Notes

Notes:	Print legend includes sequential footage marks.
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History

Update and Revision:	Revision Number: 0.295 Revision Date: 08-22-2019
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