



Product: [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, Flamarrest® jacket

Technical Specifications

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
FEP - Fluorinated Ethylene Propylene (Foam)	Teflon®	0.133 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Alum / Poly / Alum	Duofoil®	100%
Braid	2	Tinned Copper (TC)		95%

Outer Jacket Material

Material	Material Trade Name	Nominal Diameter
PVC - Polyvinyl Chloride	Flamarrest®	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. Pull Tension:	68 lbs
Min Bend Radius/Minor Axis:	2 in

Standards

NEC/(UL) Compliance:	CMP
CEC/C(UL) Compliance:	CMP
CPR Euroclass:	Eca
RG Type:	59/U Type

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Plenum
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
MII 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, LS0H, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
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	Putup Type	Length	UPC
1506A 010500	Black	Reel	500 ft	612825116660
1506A 0101000	Black	Reel	1,000 ft	612825116653
1506A 0105000	Black	Reel	5,000 ft	612825435877
1506A 0061000	Blue, Light	Reel	1,000 ft	612825116622
1506A 0065000	Blue, Light	Reel	5,000 ft	612825435914
1506A 0011000	Brown	Reel	1,000 ft	612825116585
1506A 0081000	Gray	Reel	1,000 ft	612825116646
1506A 0085000	Gray	Reel	5,000 ft	612825435938
1506A N3U1000	Green, Mil	Reel	1,000 ft	612825116578
1506A 877500	Natural	Reel	500 ft	612825116684
1506A 8771000	Natural	Reel	1,000 ft	612825116677
1506A 8775000	Natural	Reel	5,000 ft	612825435884
1506A 0031000	Orange	Reel	1,000 ft	612825116608
1506A 0021000	Red	Reel	1,000 ft	612825116592
1506A 0025000	Red	Reel	5,000 ft	612825435891
1506A 0071000	Violet	Reel	1,000 ft	612825116639
1506A 0075000	Violet	Reel	5,000 ft	612825435921
1506A 0095000	White	Reel	5,000 ft	612825435945
1506A 0041000	Yellow	Reel	1,000 ft	612825116615
1506A 0045000	Yellow	Reel	5,000 ft	612825435907

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: 0.302 Revision Date: 04-28-2020
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Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.