

Part Number: 1505A

Serial Digital Coax, RG59, #20 Solid BC, Foil + 95% TC Braid, CMR

## Product Description

Low Loss Serial Digital Coax, Riser-CMR, RG59 20 AWG solid bare copper conductor, foam HDPE core, Duofoil+95% tinned copper braid, PVC jacket

## Technical Specifications

Suitable Applications:	SMPTE 2081-1 6 Gb/s UHD TV, SMPTE 424M 3 Gb/s HD-SDI 1080p
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## Construction and Dimensions

### Conductor:

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

Total Number of Conductors:	1
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### Insulation:

Material	Nominal Diameter
Gas injected FHDPE - Foam High Density Polyethylene	0.145 in

### Outershield 1:

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

### Outerjacket 1:

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.233 in

## Electrical Characteristics

### Conductor DCR:

Nominal Conductor DCR	Nominal Outer Shield DCR
10 Ohm/1000ft	3.8 Ohm/1000ft

## Capacitance:

Nom. Capacitance Conductor to Shield	
16.3 pF/ft	
Other Electrical Characteristic 1:	Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge and termination. 75 +/- 1.5 Ohms
Other Electrical Characteristic 2:	Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, using a 75 Ohm fixed bridge and termination.
Sweep Testing:	100% Sweep tested 5 MHz to 6 GHz.

## Impedance:

Nominal Characteristic Impedance
75 Ohm

## High Frequency (Nominal/Typical):

Frequency [MHz]	Norm. Insertion Loss
1 MHz	0.3 dB/100ft
3.6 MHz	0.6 dB/100ft
5 MHz	0.63 dB/100ft
6 MHz	0.69 dB/100ft
7 MHz	0.74 dB/100ft
10 MHz	0.9 dB/100ft
12 MHz	0.91 dB/100ft
25 MHz	1.3 dB/100ft
67.5 MHz	2.05 dB/100ft
71.5 MHz	2.1 dB/100ft
88.5 MHz	2.2 dB/100ft
100 MHz	2.3 dB/100ft
135 MHz	2.7 dB/100ft
143 MHz	2.8 dB/100ft
180 MHz	3.1 dB/100ft
270 MHz	3.8 dB/100ft
360 MHz	4.4 dB/100ft
540 MHz	5.5 dB/100ft
720 MHz	6.4 dB/100ft
750 MHz	6.5 dB/100ft
1000 MHz	7.6 dB/100ft
1500 MHz	9.3 dB/100ft
2000 MHz	10.9 dB/100ft
2250 MHz	11.6 dB/100ft
3000 MHz	13.4 dB/100ft
4500 MHz	16.4 dB/100ft
6000 MHz	21.1 dB/100ft

**Delay:**

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.24 ns/ft	82 %

**High Freq:**

Min. RL (Return Loss) [dB]
23 dB
21 dB

**Inductance:**

<b>Nominal Inductance</b>	
0.107 $\mu$ H/ft	

## Voltage:

<b>UL Voltage Rating</b>	
300V RMS V	

## Use

<b>Suitability - Indoor:</b>	Yes
<b>Max Recommended Pulling Tension:</b>	52 lbs

## Safety

<b>CSA Flammability:</b>	FT4
<b>UL Flammability:</b>	UL1666 Vertical Shaft

## Temperature Range

<b>Operating Temp Range:</b>	-30°C To +75°C °C
<b>UL Temp Rating:</b>	75°C °C

## Mechanical Characteristics

<b>Min Bend Radius/Minor Axis:</b>	2.5 in
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## Part Number

<b>Plenum (Y/N):</b>	No
<b>Plenum Number:</b>	1506A

## Standards

<b>CA Prop 65 (CJ for Wire &amp; Cable):</b>	Yes
<b>CEC/C(UL) Specification:</b>	CMG
<b>MII Order #39 (China RoHS):</b>	Yes
<b>NEC/(UL) Specification:</b>	CMR
<b>RG Type:</b>	59/U
<b>EU Directive Compliance:</b>	EU Directive 2003/11/EC (BFR)
<b>EU CE Mark:</b>	Yes

## History

Notes:

Also available in 4.5 GHz multi-coax bundled versions. See 7794A through 7798A.

## Product Variants

Part Number	Color	Put-Up Type	Length
1505A			
1505A			
1505A	BROWN	Reel	1000 ft
1505A	BROWN	Reel	305 m
1505A 0011000	BROWN	Reel	1000 ft
1505A	BROWN	Reel	5000 ft
1505A	BROWN	Reel	1524 m
1505A 0015000	BROWN	Reel	5000 ft
1505A			
1505A			
1505A	BROWN	Reel	1524 m
1505A	RED	Reel	1000 ft
1505A	RED	Reel	305 m
1505A 0021000	RED	Reel	1000 ft
1505A	ORANGE	Reel	5000 ft
1505A	RED	Reel	1524 m
1505A 0025000	ORANGE	Reel	5000 ft
1505A	RED	Reel	500 ft
1505A	RED	Reel	152 m
1505A 002500	RED	Reel	500 ft
1505A			
1505A			
1505A	ORANGE	Reel	1000 ft
1505A	ORANGE	Reel	305 m
1505A 0031000	ORANGE	Reel	1000 ft
1505A	ORANGE	Reel	5000 ft
1505A	ORANGE	Reel	1524 m
1505A 0035000	ORANGE	Reel	5000 ft
1505A			
1505A			
1505A	YELLOW	Reel	1000 ft

1505A	YELLOW	Reel	305 m
1505A 0041000	YELLOW	Reel	1000 ft
1505A	YELLOW	Reel	5000 ft
1505A	YELLOW	Reel	1524 m
1505A 0045000	YELLOW	Reel	5000 ft
1505A			
1505A			
1505A	YELLOW	Reel	305 m
1505A	BLUE, LIGHT	Reel	1000 ft
1505A	BLUE, LIGHT	Reel	305 m
1505A 0061000	BLUE, LIGHT	Reel	1000 ft
1505A	BLUE, LIGHT	Reel	5000 ft
1505A	BLUE, LIGHT	Reel	1524 m
1505A 0065000	BLUE, LIGHT	Reel	5000 ft
1505A	BLUE, LIGHT	Reel	500 ft
1505A	BLUE, LIGHT	Reel	152 m
1505A 006500	BLUE, LIGHT	Reel	500 ft
1505A			
1505A			
1505A	VIOLET	Reel	1000 ft
1505A	PURPLE	Reel	305 m
1505A 0071000	VIOLET	Reel	1000 ft
1505A	VIOLET	Reel	5000 ft
1505A	PURPLE	Reel	1524 m
1505A 0075000	VIOLET	Reel	5000 ft
1505A			
1505A			
1505A	GRAY	Reel	1000 ft
1505A	GRAY	Reel	305 m
1505A 0081000	GRAY	Reel	1000 ft
1505A	GRAY	Reel	5000 ft
1505A	GRAY	Reel	1524 m
1505A 0085000	GRAY	Reel	5000 ft
1505A			
1505A			
1505A	WHITE	Reel	1000 ft

1505A	WHITE	Reel	305 m
1505A 0091000	WHITE	Reel	1000 ft
1505A	WHITE	Reel	5000 ft
1505A	WHITE	Reel	1524 m
1505A 0095000	WHITE	Reel	5000 ft
1505A			
1505A			
1505A	BLACK	Reel	3048 m
1505A	BLACK	Reel	1000 ft
1505A	BLACK	Reel	305 m
1505A 0101000	BLACK	Reel	1000 ft
1505A	BLACK	Reel	5000 ft
1505A	BLACK	Reel	1524 m
1505A 0105000	BLACK	Reel	5000 ft
1505A	BLACK	Reel	500 ft
1505A	BLACK	Reel	152 m
1505A 010500	BLACK	Reel	500 ft
1505A			
1505A			
1505A	BLACK	Reel	305 m
1505A	BLACK	Reel	1524 m
1505A	GREEN, MIL	Reel	1000 ft
1505A	MIL GREEN	Reel	305 m
1505A N3U1000	GREEN, MIL	Reel	1000 ft
1505A	GREEN, MIL	Reel	5000 ft
1505A	MIL GREEN	Reel	1524 m
1505A N3U5000	GREEN, MIL	Reel	5000 ft
1505A			
1505A			
1505A	MIL GREEN	Reel	305 m
1505A.001525	BLACK	Reel	1525 m
1505A.00152	BLACK	Reel	152 m
1505A.00305	BLACK	Reel	305 m
1505A.011525	VIOLET	Reel	1525 m
1505A.01152	VIOLET	Reel	152 m
1505A.01305	VIOLET	Reel	305 m

1505A.021525	RED, RAL 3000	Reel	1525 m
1505A.02152	RED, RAL 3000	Reel	152 m
1505A.02305	RED, RAL 3000	Reel	305 m
1505A.031525	ORANGE	Reel	1525 m
1505A.03305	ORANGE	Reel	305 m
1505A.041525	YELLOW, RAL 1021	Reel	1525 m
1505A.04305	YELLOW, RAL 1021	Reel	305 m
1505A.051525	BLUE, RAL 5015	Reel	1525 m
1505A.05152	BLUE, RAL 5015	Reel	152 m
1505A.05305	BLUE, RAL 5015	Reel	305 m
1505A.061525	GREEN	Reel	1525 m
1505A.06305	GREEN	Reel	305 m
1505A.071525	WHITE	Reel	1525 m
1505A.07305	WHITE	Reel	305 m
1505A.081525	GRAY, SLATE	Reel	1525 m
1505A.08305	GRAY, SLATE	Reel	305 m
1505A	BLACK	Reel	305 m
1505A			

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