

Part Number: 8281

Precision Video Coax, RG59, #20 Solid BC, Double 98% Braid



Product Description

20 AWG solid .031" bare copper conductor, polyethylene insulation, tinned copper/bare copper double braid shield (95% coverage), polyethylene jacket.

Technical Specifications

Construction and Dimensions

Conductor:

AWG	Stranding	Material	Nominal Diameter	No. of Coax
20	Solid	BC - Bare Copper	0.031 in	1
Total Number of Conductors:			1	

Insulation:

Material	Nominal Diameter
PE - Polyethylene	0.198 in

Outershield 1:

Type	Layer	Material	Coverage [%]
Braid	1	TC - Tinned Copper	95 %
Braid	2	TC - Tinned Copper	95 %

Outerjacket 1:

Material	Nominal Diameter
PE - Polyethylene	0.305 in

Electrical Characteristics

Conductor DCR:

Nominal Conductor DCR	Nominal Outer Shield DCR
9.9 Ohm/1000ft	1.1 Ohm/1000ft

Capacitance:

Nom. Capacitance Conductor to Shield	
21 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 5MHz to 850MHz.

Impedance:

Nominal Characteristic Impedance
75 Ohm

High Frequency (Nominal/Typical):

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.3 dB/100ft
3.6 MHz	0.5 dB/100ft
10 MHz	0.8 dB/100ft
71.5 MHz	2.1 dB/100ft
135 MHz	3 dB/100ft
270 MHz	4.3 dB/100ft
360 MHz	5.1 dB/100ft
540 MHz	6.3 dB/100ft
720 MHz	7.4 dB/100ft
750 MHz	7.6 dB/100ft
1000 MHz	9.2 dB/100ft

Delay:

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.54 ns/ft	66 %

High Freq:

Min. SRL (Structural Return Loss)
27 dB
23 dB

Inductance:

Nominal Inductance	
0.131 μ H/ft	

Voltage:

Non-UL Voltage Rating	
2900V RMS	

Use

Max Recommended Pulling Tension:	168 lbs
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Temperature Range

Non-UL Temp Rating:	80°C °C
Operating Temp Range:	-55°C To +80°C °C

Mechanical Characteristics

Min Bend Radius/Minor Axis:	3 in
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Part Number

Plenum (Y/N):	No
Plenum Number:	88281

Standards

CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
RG Type:	59/U
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No

Product Variants

Part Number	Color	Put-Up Type	Length
8281			
8281	RED	Reel	1000 ft
8281	RED	Reel	305 m
8281 0021000	RED	Reel	1000 ft
8281	RED	Reel	500 ft

8281	RED	Reel	152 m
8281 002500	RED	Reel	500 ft
8281	ORANGE	Reel	1000 ft
8281	ORANGE	Reel	305 m
8281 0031000	ORANGE	Reel	1000 ft
8281	YELLOW	Reel	1000 ft
8281	YELLOW	Reel	305 m
8281 0041000	YELLOW	Reel	1000 ft
8281	YELLOW	Reel	500 ft
8281	YELLOW	Reel	152 m
8281 004500	YELLOW	Reel	500 ft
8281	GREEN, DARK	Reel	1000 ft
8281	GREEN, DARK	Reel	305 m
8281 0051000	GREEN, DARK	Reel	1000 ft
8281	GREEN, DARK	Reel	500 ft
8281	GREEN, DARK	Reel	152 m
8281 005500	GREEN, DARK	Reel	500 ft
8281	BLUE, LIGHT	Reel	1000 ft
8281	BLUE, LIGHT	Reel	305 m
8281 0061000	BLUE, LIGHT	Reel	1000 ft
8281	BLUE, LIGHT	Reel	500 ft
8281	BLUE, LIGHT	Reel	152 m
8281 006500	BLUE, LIGHT	Reel	500 ft
8281	WHITE	Reel	1000 ft
8281	WHITE	Reel	305 m
8281 0091000	WHITE	Reel	1000 ft
8281	BLACK	Reel	1000 ft
8281	BLACK	Reel	305 m
8281 0101000	BLACK	Reel	1000 ft
8281	BLACK	Reel	5000 ft
8281 0105000	BLACK	Reel	5000 ft
8281	BLACK	Reel	500 ft
8281	BLACK	Reel	152 m
8281 010500	BLACK	Reel	500 ft
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