

## 1694F Coax - Low Loss Serial Digital Coax

For more Information  
please call

1-800-Belden1



### Description:

19 AWG stranded (7x27) bare copper conductor, gas-injected foam HDPE insulation, double tinned copper braid shield (98% coverage), PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	19	7x27	BC - Bare Copper	.040

#### Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.180

#### Outer Shield

Outer Shield Material:

Layer #	Type	Outer Shield Material	Coverage (%)
1	Braid	TC - Tinned Copper	93.000
2	Braid	TC - Tinned Copper	94.000

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

#### Overall Cabling

Overall Nominal Diameter: 0.276 in.

### Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +75°C

UL Temperature Rating: 75°C

Bulk Cable Weight: 50 lbs/1000 ft.

Max. Recommended Pulling Tension: 82 lbs.

Min. Bend Radius (Install)/Minor Axis: 2.750 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2004

EU Directive 2002/96/EC (WEEE): Yes

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EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

MII Order #39 (China RoHS): Yes

RG Type: 6/U

### Flame Test

UL Flame Test: UL1666 Vertical Shaft

### Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes - Black only

Suitability - Aerial: Yes - Black only, when supported by a messenger wire

### Plenum/Non-Plenum

Plenum (Y/N): No

Plenum Number: 1695A

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

75

### Nom. Inductance:

Inductance (µH/ft)

0.106

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

16.2

### Nominal Velocity of Propagation:

VP (%)

81

### Nominal Delay:

Delay (ns/ft)

1.25

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

8.5

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

1.7

### Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100 ft.)

1.000 0.240

3.580 0.450

5.000 0.540

6.000 0.550

7.000 0.620

10.000 0.720

12.000 0.830

25.000 1.180

67.500 1.900

71.500 2.000

88.500 2.200

100.000 2.400

135.000 2.800

143.000 2.900

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180.000	3.300
270.000	4.000
360.000	4.700
540.000	5.900
720.000	6.900
750.000	7.000
1000.000	8.200
1500.000	10.400
2000.000	12.300
2250.000	13.200
3000.000	15.600
4500.000	19.800

### Max. Operating Voltage - UL:

Voltage
300 V RMS

### Max. Operating Voltage - Non-UL:

Voltage
300 V RMS

**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.

### Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5	850	20
850	4500	15

### Sweep Test

**Sweep Testing:** 100% Sweep tested 5 MHz to 4.5 GHz.

### Related Documents:

No related documents are available for this product

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1694F B591000	1,000 FT	54.000 LB	BLACK, MATTE	C	#19 GIFHDLPE DBLB FRPVC
1694F G7V1000	1,000 FT	54.000 LB	RED, MATTE	C	QLTHLDFHDLPE DBLB FRPVC
1694F G7W1000	1,000 FT	54.000 LB	GREEN, MATTE	C	#19 GIFHDLPE DBLB FRPVC
1694F G7X1000	1,000 FT	54.000 LB	BLUE, MATTE	C	#19 GIFHDLPE DBLB FRPVC
1694F G7Y1000	1,000 FT	54.000 LB	WHITE, MATTE	C	#19 GIFHDLPE DBLB FRPVC
1694F G8L1000	1,000 FT	54.000 LB	ORANGE, MATTE	C	#19 GIFHDLPE DBLB FRPVC
1694F G8M1000	1,000 FT	54.000 LB	YELLOW, MATTE	C	#19 GIFHDLPE DBLB FRPVC
1694F Z4B1000	1,000 FT	54.000 LB	VIO Z4B	C	#19 GIFHDLPE DBLB FRPVC

#### Notes:

C = CRATE REEL PUT-UP.

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