

1694F Coax - Low Loss Serial Digital Coax

For more Information
please call

1-800-Belden1

**General Description:**

19 AWG stranded (7x27) bare copper conductor, gas-injected foam HDPE insulation, double tinned copper braid shield (95% coverage), PVC jacket.

Physical Characteristics (Overall)**Conductor**

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	19	7x27	BC - Bare Copper	1.016

Total Number of Conductors: 1

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	4.572

Outer Shield

Outer Shield Material:

Layer #	Type	Outer Shield Material	Coverage (%)
1	Braid	TC - Tinned Copper	95.000
2	Braid	TC - Tinned Copper	95.000

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 7.010 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +75°C
UL Temperature Rating:	75°C
Bulk Cable Weight:	74.410 Kg/Km
Max. Recommended Pulling Tension:	515.991 N
Min. Bend Radius/Minor Axis:	69.850 mm

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
EU Directive 2011/65/EU (RoHS II):	Yes
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
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MIL Order #39 (China RoHS):	Yes
RG Type:	6/U

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Flame Test

UL Flame Test:	UL1666 Vertical Shaft
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Suitability

Suitability - Indoor:	Yes
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Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1695A

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (µH/m)
0.347786

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
53.1522

Nominal Velocity of Propagation:

VP (%)
81

Nominal Delay:

Delay (ns/m)
4.10125

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
27.8885

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
5.5777

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1.000	0.787
3.580	1.476
5.000	1.772
6.000	1.805
7.000	2.034
10.000	2.362
12.000	2.723
25.000	3.872
67.500	6.234
71.500	6.562
88.500	7.218
100.000	7.874
135.000	9.187
143.000	9.515
180.000	10.827
270.000	13.124
360.000	15.421
540.000	19.358
720.000	22.639
750.000	22.967
1000.000	26.904
1500.000	34.122
2000.000	40.356
2250.000	43.309
3000.000	51.184
4500.000	64.964

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Operating Voltage - Non-UL:

METRIC MEASUREMENT VERSION

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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.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1694F B59N1000	1,000 FT	53.000 LB	BLACK, MATTE		#19 GIFHDLDP E DBLB FRPVC
1694F B591000	1,000 FT	54.000 LB	BLACK, MATTE	C	#19 GIFHDLDP E DBLB FRPVC
1694F G7V1000	1,000 FT	54.000 LB	RED, MATTE	C	#19 GIFHDLDP E DBLB FRPVC
1694F G7W1000	1,000 FT	54.000 LB	GREEN, MATTE	C	#19 GIFHDLDP E DBLB FRPVC
1694F G7X1000	1,000 FT	54.000 LB	BLUE, MATTE	C	#19 GIFHDLDP E DBLB FRPVC
1694F G7Y1000	1,000 FT	54.000 LB	WHITE, MATTE	C	#19 GIFHDLDP E DBLB FRPVC
1694F G8L1000	1,000 FT	54.000 LB	ORANGE, MATTE	C	#19 GIFHDLDP E DBLB FRPVC
1694F G8M1000	1,000 FT	54.000 LB	YELLOW, MATTE	C	#19 GIFHDLDP E DBLB FRPVC
1694F Z4B1000	1,000 FT	54.000 LB	VIO Z4B	C	#19 GIFHDLDP E DBLB FRPVC

Notes:

C = CRATE REEL PUT-UP.

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