# **Detailed Specifications & Technical Data**



ENGLISH MEASUREMENT VERSION

### 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. (in.)	
1 19 7x27 BC - Bare Copper .040	
Total Number of Conductors:	1
Insulation Insulation Material:	
Insulation Material         Dia. (in.)           Gas-injected FHDPE - Foam High Density Polyethylene         .180	
Outer Shield Outer Shield Material:	
Layer # TypeOuter Shield MaterialCoverage (%)1BraidTC - Tinned Copper95.0002BraidTC - Tinned Copper95.000	
Outer Jacket	
Outer Jacket Material: Outer Jacket Material	
PVC - Polyvinyl Chloride	
Overall Cable	
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:	116 lbs.
Min. Bend Radius/Minor Axis:	2.750 in.
Applicable Specifications and Agency Compliance (	
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
MII Order #39 (China RoHS):	Yes

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Flame Test		
UL Flam	e Test:	UL1666 Vertical Shaft
Suitability		
-	y - Indoor:	Yes
Plenum/Nor		
Plenum/Nor Plenum (		Νο
Plenum	Number:	1695A
lectrical C	haracteristics (Ove	erall)
	eristic Impedance:	
Impedance	e (Ohm)	
75		
Nom. Inducta	nce:	
Inductance	e (μH/ft)	
0.106		
	ance Conductor to Shield	k:
Capacitan	ce (pF/ft)	
16.2		
	city of Propagation:	
VP (%)		
81		
Nominal Dela		
Delay (ns/ 1.25	τ)	
	tor DC Resistance: °C (Ohm/1000 ft)	
8.5		
	r Shield DC Resistance:	
1.7	°C (Ohm/1000 ft)	
Nom. Attenua		
Freq. (MHz 1.000	Attenuation (dB/100 ft.) 0.240	
3.580	0.450	-
5.000	0.540	-
6.000	0.550	-
7.000	0.620	-
10.000	0.720	1
12.000	0.830	
25.000	1.180	
67.500	1.900	_
71.500 88.500	2.000	-
100.000	2.400	-
135.000	2.800	-
143.000	2.900	-
180.000	3.300	
270.000	4.000	1
360.000	4.700	]
540.000	5.900	
720.000	6.900	-
750.000 1000.000	7.000 8.200	4
1500.000	10.400	-
2000.000	12.300	-
2250.000	13.200	1
3000.000	15.600	1
4500.000	19.800	
Max. Operatir	ig Voltage - UL:	
Voltage		
300 V RMS		
	_ Ig Voltage - Non-UL:	

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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 GIFHDLDPE DBLB FRPVC
1694F B591000	1,000 FT	54.000 LB	BLACK, MATTE	С	#19 GIFHDLDPE DBLB FRPVC
1694F G7V1000	1,000 FT	54.000 LB	RED, MATTE	С	#19 GIFHDLDPE DBLB FRPVC
1694F G7W1000	1,000 FT	54.000 LB	GREEN, MATTE	С	#19 GIFHDLDPE DBLB FRPVC
1694F G7X1000	1,000 FT	54.000 LB	BLUE, MATTE	С	#19 GIFHDLDPE DBLB FRPVC
1694F G7Y1000	1,000 FT	54.000 LB	WHITE, MATTE	С	#19 GIFHDLDPE DBLB FRPVC
1694F G8L1000	1,000 FT	54.000 LB	ORANGE, MATTE	С	#19 GIFHDLDPE DBLB FRPVC
1694F G8M1000	1,000 FT	54.000 LB	YELLOW, MATTE	С	#19 GIFHDLDPE DBLB FRPVC
1694F Z4B1000	1,000 FT	54.000 LB	VIO Z4B	С	#19 GIFHDLDPE DBLB FRPVC

Notes: C = CRATE REEL PUT-UP.

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