Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

1694F Coax - Low Loss Serial Digital Caox

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

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

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.

Put Ups and Colors:

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

Notes:
C = CRATE REEL PUT-UP.

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to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.
Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.