Detailed Specifications & Technical Data

BELDENCable

1694A Coax - Low Loss Serial Digital Coax

For more information please call

1-800-Belden1

See Put-ups and Colors

Description:

RG-6/U Type, 18 AWG solid .040" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), PVC jacket.

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Coax	1
Total Number of Conductors	1
RG Type	6/U
AWG	18
Stranding	Solid
Conductor Diameter	.040 in.
Conductor Material	BC - Bare Copper

INSULATION:

Insulation Material	Gas-injected FHDPE - Foam High Density Polyethylene
Insulation Diameter	.180 in.

OUTER SHIELD:

Outer Shield Material Trade Name	Duofoil®
Outer Shield Type	Tape/Braid

Outer Shield Material :

Layer Number	Trade Name	Type	Material	% Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

Outer Shield %Coverage	100 %

OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride

OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.274 in.

MECHANICAL CHARACTERISTICS:

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Operating Temperature Range	-30°C To +75°C
UL Temperature Rating	75°C
Bulk Cable Weight	40 lbs/1000 ft.
Max. Recommended Pulling Tension	69 lbs.
Min. Bend Radius (Install)	2.75 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

NEC/(UL) Specification	CMR
CEC/C(UL) Specification	CMG
EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004

FLAME TEST:

UL Flame Test	UL1666 Vertical Shaft

SWEEP TEST:

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

SUITABILITY:

Suitability - Indoor	Yes
Suitability - Outdoor	Yes - Black only
Suitability - Aerial	Yes - Black only, when supported by a messenger wire
Suggested Connectors	AMP 221185-1 Dual Crimp Gold Pin BNC (75 Ohms); Amphenol 31-70000 Dual Crimp Gold Pin BNC (75 Ohms); Kings 2065-10-9 Dual Crimp Gold Pin (75 Ohms); Trompeter UPL220-20 Dual Crimp Gold Pin BNC (75 Ohm); ADC BNC-1694D Dual Crimp Gold Pin BNC (75 Ohm)

PLENUM/NON-PLENUM:

Plenum (Y/N)	N
Plenum Number	1695A

ELECTRICAL CHARACTERISTICS:

Nom. Characteristic Impedance	75 Ohms
Nom. Inductance	0.106 µH/ft
Nom. Capacitance Conductor to Shield	16.2 pF/ft
Nominal Velocity of Propagation	82 %
Nominal Delay	1.24 ns/ft
Nom. Conductor DC Resistance @ 20 Deg. C	6.4 Ohms/1000 ft
Nominal Outer Shield DC Resistance @ 20°C	2.8 Ohms/1000 ft
Minimum Return Loss :	

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Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Minimum Return Loss (dB)
		5	1600	23
		1600	4500	21

Nom. Attenuation :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100 ft.)
	1			0.24
	3.58			0.45
	5			0.54
	7			0.63
	10			0.72
	67.5			1.57
	71.5			1.60
	88.5			1.75
	100			1.84
	135			2.10
	143			2.16
	180			2.42
	270			2.97
	360			3.43
	540			4.25
	720			4.95
	750			5.00
	1000			5.89
	1500			7.33
	2000			8.57
	2250			9.14
	3000			10.67
	4500			13.29

Max. Operating Voltage - UL	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.

NOTES:

Notes	Also available in bundled versions. See 7710A through 7713A.

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
1694A 0011000	#18 PE/GIFHDPE SH FR PVC	1000	45	BROWN	C
1694A 0014500	#18 PE/GIFHDPE SH FR PVC	4500	202.5	BROWN	C

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1694A 0021000	#18 PE/GIFHDPE SH FR PVC	1000	45	RED	C
1694A 0024500	#18 PE/GIFHDPE SH FR PVC	4500	202.5	RED	C
1694A 0031000	#18 PE/GIFHDPE SH FR PVC	1000	45	ORANGE	C
1694A 0034500	#18 PE/GIFHDPE SH FR PVC	4500	202.5	ORANGE	C
1694A 0041000	#18 PE/GIFHDPE SH FR PVC	1000	45	YELLOW	C
1694A 0044500	#18 PE/GIFHDPE SH FR PVC	4500	202.5	YELLOW	C
1694A 0061000	#18 PE/GIFHDPE SH FR PVC	1000	45	BLUE, LIGHT	C
1694A 0064500	#18 PE/GIFHDPE SH FR PVC	4500	202.5	BLUE, LIGHT	C
1694A 0071000	#18 PE/GIFHDPE SH FR PVC	1000	45	VIOLET	C
1694A 0074500	#18 PE/GIFHDPE SH FR PVC	4500	202.5	VIOLET	C
1694A 0081000	#18 PE/GIFHDPE SH FR PVC	1000	45	GRAY	C
1694A 0084500	#18 PE/GIFHDPE SH FR PVC	4500	202.5	GRAY	C
1694A 0091000	#18 PE/GIFHDPE SH FR PVC	1000	45	WHITE	C
1694A 0094500	#18 PE/GIFHDPE SH FR PVC	4500	202.5	WHITE	C
1694A 0101000	#18 PE/GIFHDPE SH FR PVC	1000	45	BLACK	C
1694A 0104500	#18 PE/GIFHDPE SH FR PVC	4500	202.5	BLACK	C
1694A 010500	#18 PE/GIFHDPE SH FR PVC	500	20.5	BLACK	C
1694A N3U1000	#18 PE/GIFHDPE SH FR PVC	1000	45	GREEN, MIL	C
1694A N3U4500	#18 PE/GIFHDPE SH FR PVC	4500	202.5	GREEN, MIL	C

C = CRATE REEL PUT-UP.

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