



Product: <u>1694WB</u> ☑

Serial Digital Coax, RG6, #18 Solid BC, Foil + 95% TC braid, Waterblocked

Product Description

Low Loss Serial Digital Coax, RG6 18 AWG solid bare copper conductor, foam HDPE core, Duofoil®+95% tinned copper braid, waterblocking grease, PE

Technical Specifications

Produ	Product Overview				
Suitable Applications: SMPTE 42		SMPTE 424M 3 Gb/s	HD-SDI 1080p		
Physi	Physical Characteristics (Overall)				
Conduc	conductor				
AWG	Stranding	Material	Nominal Diameter	No. of Coax	
18	Solid	BC - Bare Coppe	er 0.04 in	1	
Condu	ctor Count:		1		
Insulati	on				
	Material	Nominal	Diameter		
PE - Po	PE - Polyethylene (Foam) 0.18 in				

Table Notes: **Outer Shield**

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	2	Tinned Copper (TC)		95%
Table	Notes:	Outer Shie	ld Flooding Grease	

Gas Injected

Outer Jacket

Material	Nominal Diameter
PE - Polyethylene	0.274 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
6.4 Ohm/1000ft	2.8 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield 16.2 pF/ft

Inductance

Nominal Inductance 0.106 µH/ft

Impedance

Nominal Characteristic Impedance

Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5 MHz - 1600 MHz	23 dB
1600 MHz - 4500 MHz	21 dB

High Frequency (Nominal/Typical)

1 MHz 0.24 dB/100ft 3.58 MHz 0.44 dB/100ft 5 MHz 0.52 dB/100ft 6 MHz 0.57 dB/100ft 10 MHz 0.61 dB/100ft 12 MHz 0.71 dB/100ft 12 MHz 0.78 dB/100ft 1.65 dB/10	Frequency [MHz]	Nom. Insertion Loss
5 MHz	1 MHz	0.24 dB/100ft
6 MHz 0.57 dB/100ft 7 MHz 0.61 dB/100ft 10 MHz 0.71 dB/100ft 12 MHz 0.78 dB/100ft 12 MHz 1.08 dB/100ft 15 MHz 1.65 dB/100ft 1.5 MHz 1.69 dB/100ft 1.5 MHz 1.69 dB/100ft 100 MHz 1.95 dB/100ft 135 MHz 2.24 dB/100ft 135 MHz 2.3 dB/100ft 143 MHz 2.3 dB/100ft 180 MHz 2.57 dB/100ft 270 MHz 3.17 dB/100ft 360 MHz 3.69 dB/100ft 720 MHz 4.5 dB/100ft 750 MHz 5.3 dB/100ft 1000 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 9.2 dB/100ft 2000 MHz 9.2 dB/100ft 2000 MHz 9.2 dB/100ft 3000 MHz 9.8 dB/100ft	3.58 MHz	0.44 dB/100ft
7 MHz 0.61 dB/100ft 10 MHz 0.71 dB/100ft 12 MHz 0.78 dB/100ft 25 MHz 1.65 dB/100ft 1.69 dB/100ft 1.60 MHz 1.60 MHz 1.60 dB/100ft 1.60 MHz 1.	5 MHz	0.52 dB/100ft
10 MHz	6 MHz	0.57 dB/100ft
12 MHz 0.78 dB/100ft 25 MHz 1.08 dB/100ft 67.5 MHz 1.65 dB/100ft 71.5 MHz 1.69 dB/100ft 88.5 MHz 1.86 dB/100ft 100 MHz 1.95 dB/100ft 135 MHz 2.24 dB/100ft 143 MHz 2.3 dB/100ft 180 MHz 2.57 dB/100ft 270 MHz 3.17 dB/100ft 360 MHz 4.5 dB/100ft 540 MHz 5.3 dB/100ft 720 MHz 5.3 dB/100ft 750 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 9.2 dB/100ft 2000 MHz 9.2 dB/100ft 2000 MHz 9.2 dB/100ft 2000 MHz 9.8 dB/100ft 3000 MHz 9.8 dB/100ft	7 MHz	0.61 dB/100ft
25 MHz 1.08 dB/100ft 67.5 MHz 1.65 dB/100ft 71.5 MHz 1.69 dB/100ft 88.5 MHz 1.86 dB/100ft 100 MHz 1.95 dB/100ft 135 MHz 2.24 dB/100ft 143 MHz 2.3 dB/100ft 180 MHz 2.57 dB/100ft 180 MHz 3.17 dB/100ft 360 MHz 3.69 dB/100ft 4.5 dB/100ft 540 MHz 5.3 dB/100ft 540 MHz 5.3 dB/100ft 50 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 1500 MHz 9.2 dB/100ft 12250 MHz 9.8 dB/100ft 11.5 dB/100ft	10 MHz	0.71 dB/100ft
67.5 MHz 1.65 dB/100ft 71.5 MHz 1.69 dB/100ft 88.5 MHz 1.86 dB/100ft 100 MHz 1.95 dB/100ft 135 MHz 2.24 dB/100ft 143 MHz 2.3 dB/100ft 180 MHz 2.57 dB/100ft 270 MHz 3.17 dB/100ft 360 MHz 3.69 dB/100ft 540 MHz 4.5 dB/100ft 720 MHz 5.3 dB/100ft 750 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	12 MHz	0.78 dB/100ft
71.5 MHz 1.69 dB/100ft 88.5 MHz 1.86 dB/100ft 100 MHz 1.95 dB/100ft 135 MHz 2.24 dB/100ft 143 MHz 2.3 dB/100ft 180 MHz 2.57 dB/100ft 270 MHz 3.17 dB/100ft 360 MHz 3.69 dB/100ft 540 MHz 4.5 dB/100ft 720 MHz 5.3 dB/100ft 750 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	25 MHz	1.08 dB/100ft
88.5 MHz 1.86 dB/100ft 100 MHz 1.95 dB/100ft 135 MHz 2.24 dB/100ft 143 MHz 2.3 dB/100ft 180 MHz 2.57 dB/100ft 270 MHz 3.17 dB/100ft 360 MHz 3.69 dB/100ft 540 MHz 4.5 dB/100ft 720 MHz 5.3 dB/100ft 750 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	67.5 MHz	1.65 dB/100ft
100 MHz 1.95 dB/100ft 135 MHz 2.24 dB/100ft 143 MHz 2.3 dB/100ft 180 MHz 2.57 dB/100ft 270 MHz 3.17 dB/100ft 360 MHz 3.69 dB/100ft 540 MHz 4.5 dB/100ft 720 MHz 5.3 dB/100ft 750 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2000 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	71.5 MHz	1.69 dB/100ft
135 MHz 2.24 dB/100ft 143 MHz 2.3 dB/100ft 180 MHz 2.57 dB/100ft 270 MHz 3.17 dB/100ft 360 MHz 3.69 dB/100ft 540 MHz 4.5 dB/100ft 720 MHz 5.3 dB/100ft 750 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	88.5 MHz	1.86 dB/100ft
143 MHz 2.3 dB/100ft 180 MHz 2.57 dB/100ft 270 MHz 3.17 dB/100ft 360 MHz 3.69 dB/100ft 540 MHz 4.5 dB/100ft 720 MHz 5.3 dB/100ft 750 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	100 MHz	1.95 dB/100ft
180 MHz 2.57 dB/100ft 270 MHz 3.17 dB/100ft 360 MHz 3.69 dB/100ft 540 MHz 4.5 dB/100ft 720 MHz 5.3 dB/100ft 750 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	135 MHz	2.24 dB/100ft
270 MHz 3.17 dB/100ft 360 MHz 3.69 dB/100ft 540 MHz 4.5 dB/100ft 720 MHz 5.3 dB/100ft 750 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	143 MHz	2.3 dB/100ft
360 MHz 3.69 dB/100ft 540 MHz 4.5 dB/100ft 720 MHz 5.3 dB/100ft 750 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	180 MHz	2.57 dB/100ft
540 MHz 4.5 dB/100ft 720 MHz 5.3 dB/100ft 750 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	270 MHz	3.17 dB/100ft
720 MHz 5.3 dB/100ft 750 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	360 MHz	3.69 dB/100ft
750 MHz 5.4 dB/100ft 1000 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	540 MHz	4.5 dB/100ft
1000 MHz 6.3 dB/100ft 1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	720 MHz	5.3 dB/100ft
1500 MHz 7.8 dB/100ft 2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	750 MHz	5.4 dB/100ft
2000 MHz 9.2 dB/100ft 2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	1000 MHz	6.3 dB/100ft
2250 MHz 9.8 dB/100ft 3000 MHz 11.5 dB/100ft	1500 MHz	7.8 dB/100ft
3000 MHz 11.5 dB/100ft	2000 MHz	9.2 dB/100ft
	2250 MHz	9.8 dB/100ft
4500 MHz 14.5 dB/100ft	3000 MHz	11.5 dB/100ft
	4500 MHz	14.5 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.24 ns/ft	82%

Electrical Characteristics Notes: Return Loss: Fixed bridge and termination

Temperature Range

Operating Temp Range: -55°C To +80°C

Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	36 lbs/1000ft
Max. Pull Tension:	69 lbs
Min. Bend Radius/Minor Axis:	2.75 in

Standards

RG Type: 6

Applicable Environmental and Other Programs

Environmental Space:	Outdoor - Water Exposure
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No