



Part Number: 1694WB

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 jacket

Technical Specifications

Product Overview

Environmental Space:	Outdoor - Water Exposure
Suitable Applications:	SMPTE 424M 3 Gb/s HD-SDI 1080p

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
18	Solid	BC - Bare Copper	0.04 in	1

Conductor Count:	1
Conductor Size:	18 AWG

Insulation

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.18 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Duofoil®	100 %
Braid	2	TC - Tinned Copper		95 %

Note:	Outer Shield Flooding Grease
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Outer Jacket Material

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

75 Ohm

Return Loss (RL)

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

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
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
7 MHz	0.61 dB/100ft
10 MHz	0.71 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	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
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
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Mechanical Characteristics

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

Standards

RG Type:	6/U Type
Series Type:	6/U

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)

EU CE Mark:	No
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	Yes - When supported by messenger wire
Suitability - Burial:	Yes
Suitability - Hazardous Locations:	No
Suitability - Indoor:	No
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	No

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Footnote
1694WB 0101000	Black	
1694WB 0102500	Black	C
1694WB 0105000	Black	C
1694WB 0061000	Blue, Light	
1694WB 0062500	Blue, Light	C
1694WB 0065000	Blue, Light	C

Footnote:	C - CRATE REEL PUT-UP.
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Product Notes

Notes:	Flooding grease between jacket and braid. Print legend includes sequential footage marks.
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