



Product: [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

| | |
|------------------------|--------------------------------|
| 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 | | |

| Insulation | |
|--------------------------|------------------|
| Material | Nominal Diameter |
| PE - Polyethylene (Foam) | 0.18 in |
| Table Notes: | Gas Injected |

| 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 Shield Flooding Grease | | | |

| 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 |

| |
|--------|
| 75 Ohm |
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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% |

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| Electrical Characteristics Notes: | Return Loss: Fixed bridge and termination |
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Temperature Range

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|------------------------------|----------------|
| Operating Temperature Range: | -55°C To +80°C |
|------------------------------|----------------|

Mechanical Characteristics

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|------------------------------|---------------|
| 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 |
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Applicable Environmental and Other Programs

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| 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 |

| | |
|-----------------------------|-----|
| MII Order #39 (China RoHS): | Yes |
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Suitability

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| 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 |
|---------------|----|

Related Part Numbers

Variants

| Item # | Color | Put-Up Type | Length | UPC |
|-----------------|-------------|-------------|-----------|--------------|
| 1694WB 0101000 | Black | Reel | 1,000 ft | 612825358602 |
| 1694WB 0102500 | Black | Reel | 2,500 ft | 612825357483 |
| 1694WB 0105000 | Black | Reel | 5,000 ft | 612825357490 |
| 1694WB 01010000 | Black | Reel | 10,000 ft | 612825443018 |
| 1694WB 0061000 | Blue, Light | Reel | 1,000 ft | 612825358596 |
| 1694WB 0062500 | Blue, Light | Reel | 2,500 ft | 612825357469 |
| 1694WB 0065000 | Blue, Light | Reel | 5,000 ft | 612825357476 |

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

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

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| Update and Revision: | Revision Number: 0.381 Revision Date: 02-03-2025 |
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