Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

1794A Coax - Low Loss Serial Digital Coax



For more Information please call

1-800-Belden1



General Description:

16 AWG solid 0.051" bare copper conductor, gas-injected foamed high-density polyethylene insulation, Duofoil® + tinned copper braid shield (95% coverage) plus Beldfoil® with shorting fold, PVC jacket.

| SMPTE 424M 3 G | Gb/s HD-SDI 1080p | | | |
|----------------------|--|--|--|--|
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| | | | | |
| | | | | |
| 1 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | Coverage (%) | | | |
| r Tape-Aluminum Foil | | | | |
| m Foil | 95.000 | | | |
| | 100.000 | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| 0.320 in. | | | | |
| | | | | |
| -30°C To +75°C | | | | |
| 59 lbs/1000 ft. | | | | |
| 111 lbs. | 111 lbs. | | | |
| 3.250 in. | 3.250 in. | | | |
| Overall) | | | | |
| , | | | | |
| CMR | | | | |
| CMG | | | | |
| Yes | | | | |
| 103 | | | | |
| 01/01/2004 | | | | |
| | | | | |
| 01/01/2004 | | | | |
| 01/01/2004 Yes | | | | |
| | 1 r Tape-Aluminum Foi m Foil 0.320 in. -30°C To +75°C 59 lbs/1000 ft. 1111 lbs. 3.250 in. Dverall) CMR CMR CMG Yes Yes | | | |

Detailed Specifications & Technical Data





1794A Coax - Low Loss Serial Digital Coax

| ime Test | | |
|---|--|-----------------------|
| | | |
| UL Flam | e Test: | UL1666 Vertical Shaft |
| CSA Fla | me Test: | FT4 |
| tability | | |
| - | ty - Indoor: | Yes |
| | - | 105 |
| | n-Plenum | |
| Plenum | (Y/N): | No |
| ctrical C | Characteristics (Ov | verall) |
| | teristic Impedance: | |
| Impedanc | e (Ohm) | |
| 75 | | |
| m. Inducta | nce: | |
| Inductanc | e (µH/ft) | |
| 0.091 | | |
| Capacit | ance Conductor to Shiel | ld: |
| Capacitan | | |
| 16.100 | | |
| minal Velo | city of Propagation: | |
| VP (%) | , e opugution. | |
| 84.000 | | |
| minal Dela | | |
| Delay (ns/ | | |
| 1.210 | | |
| | | |
| | tor DC Resistance: | |
| | °C (Ohm/1000 ft) | |
| 4.000 | | |
| | er Shield DC Resistance: | |
| | °C (Ohm/1000 ft) | |
| | | |
| 1.900 | | |
| m. Attenua | | _ |
| m. Attenua Freq. (MH: | z) Attenuation (dB/100 ft |) |
| m. Attenua Freq. (MHa 1.000 | z) Attenuation (dB/100 ft 0.170 | .) |
| m. Attenua Freq. (MH: 1.000 3.580 | Attenuation (dB/100 ft 0.170 0.300 | .) |
| m. Attenua Freq. (MH: 1.000 3.580 5.000 | z) Attenuation (dB/100 ft 0.170 0.300 0.350 | •) |
| m. Attenua Freq. (MH: 1.000 3.580 5.000 6.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.380 | |
| m. Attenua Freq. (MH: 1.000 3.580 5.000 6.000 7.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.380 0.400 | |
| m. Attenua Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.380 0.400 0.480 | |
| m. Attenua Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.380 0.400 0.480 0.520 | |
| m. Attenua Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.380 0.400 0.480 0.520 0.740 | |
| m. Attenua Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 55.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.380 0.400 0.480 0.520 0.740 1.080 | |
| m. Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 55.000 67.500 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.380 0.400 0.480 0.520 0.740 1.080 1.200 | |
| m. Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 55.000 67.500 71.500 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.380 0.400 0.520 0.740 1.080 1.200 1.240 | |
| m. Attenua Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 55.000 67.500 71.500 88.500 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.400 0.400 0.520 0.740 1.080 1.200 1.240 1.370 | |
| Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 55.000 67.500 71.500 88.500 100.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.400 0.480 0.520 0.740 1.080 1.200 1.240 1.370 1.460 | |
| Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 12.000 25.000 55.000 67.500 71.500 88.500 100.000 135.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.400 0.400 0.520 0.740 1.080 1.200 1.240 1.370 1.460 1.700 | |
| Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 55.000 67.500 71.500 88.500 100.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.400 0.480 0.520 0.740 1.080 1.200 1.240 1.370 1.460 | |
| Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 12.000 25.000 55.000 67.500 71.500 88.500 100.000 135.000 143.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.380 0.400 0.520 0.740 1.080 1.200 1.240 1.370 1.460 1.750 | |
| Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 12.000 25.000 55.000 67.500 71.500 88.500 100.000 135.000 143.000 180.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.350 0.350 0.350 0.350 0.350 0.350 0.350 0.350 0.350 0.360 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 1.080 1.200 1.240 1.370 1.460 1.700 1.750 1.970 | |
| m. Attenua Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500 67.500 71.500 88.500 100.000 135.000 143.000 143.000 270.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.380 0.400 0.520 0.740 1.080 1.200 1.240 1.370 1.460 1.750 1.970 2.430 | |
| Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500 67.500 71.500 88.500 100.000 135.000 143.000 270.000 360.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.380 0.400 0.400 0.400 1.200 1.200 1.240 1.370 1.460 1.750 1.970 2.430 2.830 | |
| Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500 67.500 71.500 88.500 100.000 135.000 143.000 270.000 360.000 540.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.350 0.350 0.350 0.350 0.350 0.350 0.350 0.350 0.350 0.380 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 1.080 1.200 1.240 1.370 1.460 1.750 1.970 2.430 2.830 3.500 | |
| Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500 71.500 88.500 100.000 135.000 143.000 270.000 360.000 540.000 720.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.380 0.400 0.400 0.400 1.200 1.200 1.240 1.370 1.460 1.750 2.430 2.830 3.500 4.090 | |
| Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500 71.500 88.500 100.000 135.000 143.000 270.000 360.000 540.000 720.000 750.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.380 0.400 0.400 0.400 1.200 1.240 1.370 1.460 1.750 1.970 2.430 3.500 4.090 4.180 | |
| Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 25.000 67.500 71.500 88.500 100.000 135.000 143.000 180.000 270.000 360.000 540.000 720.000 750.000 100.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.380 0.400 0.400 0.400 1.200 1.200 1.240 1.370 1.460 1.750 2.430 2.830 3.500 4.090 4.180 4.890 | |
| Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 25.000 67.500 71.500 88.500 100.000 135.000 143.000 180.000 270.000 360.000 540.000 720.000 750.000 1000.000 1500.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.380 0.400 0.400 0.400 1.200 1.240 1.370 1.460 1.750 1.970 2.430 3.500 4.090 4.180 4.890 6.100 | |
| Attenue Freq. (MH: 1.000 3.580 5.000 6.000 7.000 10.000 12.000 55.000 67.500 71.500 88.500 100.000 135.000 143.000 180.000 270.000 360.000 540.000 720.000 750.000 1000.000 1500.000 2000.000 | Attenuation (dB/100 ft 0.170 0.300 0.350 0.350 0.380 0.400 0.400 0.400 1.200 1.240 1.370 1.460 1.750 2.430 2.830 3.500 4.090 4.180 4.890 6.100 7.200 | |

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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 +/- 3 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 | 1600 | 23 |
| 1600 | 4500 | 21 |

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 |
|----------------|----------|-------------|-------------|-------|-----------------------------|
| 1794A N3U1000 | 1,000 FT | 59.000 LB | GREEN, MIL | С | #16 LDPE/GIFHDLDPE SH FRPVC |
| 1794A 0011000 | 1,000 FT | 59.000 LB | BROWN | С | #16 LDPE/GIFHDLDPE SH FRPVC |
| 1794A 0021000 | 1,000 FT | 59.000 LB | RED | С | #16 LDPE/GIFHDLDPE SH FRPVC |
| 1794A 0031000 | 1,000 FT | 59.000 LB | ORANGE | С | #16 LDPE/GIFHDLDPE SH FRPVC |
| 1794A 0041000 | 1,000 FT | 59.000 LB | YELLOW | С | #16 LDPE/GIFHDLDPE SH FRPVC |
| 1794A 0061000 | 1,000 FT | 59.000 LB | BLUE, LIGHT | С | #16 LDPE/GIFHDLDPE SH FRPVC |
| 1794A 0071000 | 1,000 FT | 59.000 LB | VIOLET | С | #16 LDPE/GIFHDLDPE SH FRPVC |
| 1794A 0081000 | 1,000 FT | 59.000 LB | GRAY | С | #16 LDPE/GIFHDLDPE SH FRPVC |
| 1794A 0091000 | 1,000 FT | 59.000 LB | WHITE | С | #16 LDPE/GIFHDLDPE SH FRPVC |
| 1794A 010N1000 | 1,000 FT | 60.000 LB | BLACK | | #16 LDPE/GIFHDLDPE SH FRPVC |
| 1794A 0101000 | 1,000 FT | 59.000 LB | BLACK | С | #16 LDPE/GIFHDLDPE SH FRPVC |

Notes:

C = CRATE REEL PUT-UP.

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