



75 Ohm 1.0/2.3 Male to 75 Ohm 1.0/2.3 Male 6G SDI  
Cable 12 Inch Length Using 75 Ohm 1694A-YW Coax

## RF Cable Assemblies Technical Data Sheet

**PE3C8818/YW-12**

### Configuration

- Connector 1: 1.0/2.3 Male
- Connector 2: 1.0/2.3 Male
- Cable Type: Belden 1694A-YW

### Features

- Max Frequency 6 GHz
- 82% Phase Velocity
- PVC Jacket
- Meets SMPTE ST 2081-1
- 6Gb/s Transmission
- Cost Effective

### Applications

- General Purpose
- Laboratory Use
- 6G-SDI, Video, and Broadband UHDTV
- Broadband Internet Delivery
- Broadcast A/V
- 4K/8K Video Equipment
- Medical Equipment Requiring High Speed Video
- HD Cameras

### Description

Pasternack's PE3C8818/YW-12 75 ohm 1.0/2.3 male to 75 ohm 1.0/2.3 male 12 inch cable using 75 ohm 1694A-YW coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack 1.0/2.3 to 1.0/2.3 cable assembly has a male to male gender configuration with 75 ohm flexible Belden 1694A-YW coax. The PE3C8818/YW-12 1.0/2.3 male to 1.0/2.3 male cable assembly operates to 6 GHz and enables 6Gb/s data transfer rates for high resolution uncompressed video signal transmission. These products offer 4K and Ultra-HD quality signals that meet SMPTE Standard 2081-1.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [75 Ohm 1.0/2.3 Male to 75 Ohm 1.0/2.3 Male 6G SDI Cable 12 Inch Length Using 75 Ohm 1694A-YW Coax PE3C8818/YW-12](#)



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### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.5:1	
Velocity of Propagation		82		%
Group Delay		4.06 [13.32]		ns/ft [ns/m]
Capacitance		16.2 [53.15]		pF/ft [pF/m]
Inductance		0.347 [1.14]		uH/ft [uH/m]
DC Resistance Inner Conductor		6.4 [21]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		3.8 [12.47]		$\Omega$ /1000ft [ $\Omega$ /Km]
Operating Voltage (AC)			300	Vrms

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	6	GHz
Insertion Loss (Typ.)	0.23	0.25	0.27	0.31	0.38	dB

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 12 in [304.8 mm]

Weight 0.1 lbs [45.36 g]

#### Cable

Cable Type Belden 1694A-YW

Impedance 75 Ohms

Inner Conductor Type Solid

Inner Conductor Material and Plating Copper, Bare

Dielectric Type PE

Number of Shields 1

Shield Layer 1 Aluminum Polyester

Shield Layer 2 Tinned Copper

Jacket Material PVC, Yellow

Jacket Diameter 0.274 in [6.96 mm]

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### Connectors

Description	Connector 1	Connector 2
Type	1.0/2.3 Male	1.0/2.3 Male
Impedance	75 Ohms	75 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	10 µin minimum	10 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Gold	Brass, Gold
Outer Conductor Plating Specification	3 µin minimum	3 µin minimum
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum

### Environmental Specifications

#### Temperature

Operating Range

-20 to +75 deg C

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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**PE3C8818/YW-12**

### How to Order

Part Number Configuration:

**PE3C8818/YW - xx uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: PE3C8818/YW-12 = 12 inches long cable  
PE3C8818/YW-100cm = 100 cm long cable

75 Ohm 1.0/2.3 Male to 75 Ohm 1.0/2.3 Male 6G SDI Cable 12 Inch Length Using 75 Ohm 1694A-YW Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [75 Ohm 1.0/2.3 Male to 75 Ohm 1.0/2.3 Male 6G SDI Cable 12 Inch Length Using 75 Ohm 1694A-YW Coax PE3C8818/YW-12](https://www.pasternack.com/75-ohm-1.0-2.3-male-to-75-ohm-1.0-2.3-male-6g-sdi-cable-12-inch-length-using-75-ohm-1694a-yw-coax-pe3c8818-yw-12)

URL: <https://www.pasternack.com/75-ohm-1.0-2.3-male-to-75-ohm-1.0-2.3-male-6g-sdi-cable-12-inch-length-using-1694a-yw-pe3c8818-yw-12-p.aspx>

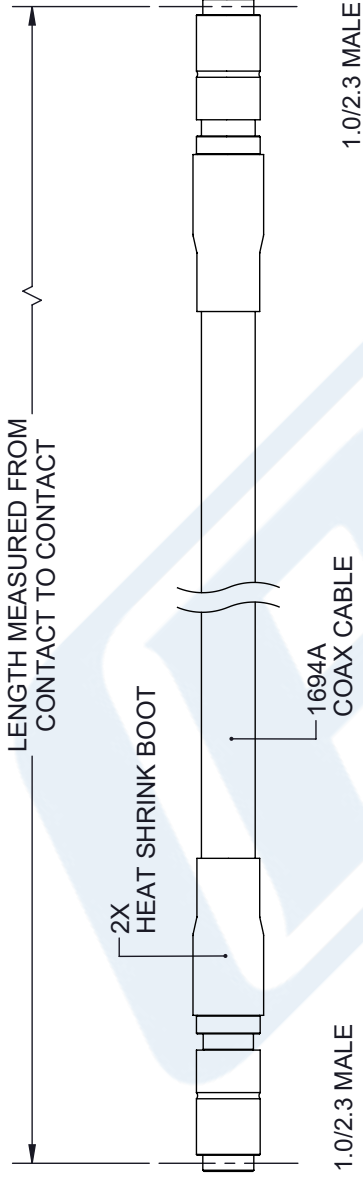
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# PE3C8818/YW-12 CAD Drawing

## 75 Ohm 1.0/2.3 Male to 75 Ohm 1.0/2.3 Male 6G SDI Cable

### 12 Inch Length Using 75 Ohm 1694A-YW Coax

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	4/29/22
		APPROVED AGANWANI



PE3C8818/ZZ (ZZ = CABLE COLOR DESIGNATION)	COAX CABLE COLOR
PE3C8818/BK	BLACK
PE3C8818/BL	BLUE
PE3C8818/BR	BROWN
PE3C8818/GR	GREEN
PE3C8818/GY	GRAY
PE3C8818/OR	ORANGE
PE3C8818/RD	RED
PE3C8818/VL	VIOLET
PE3C8818/WH	WHITE
PE3C8818/YW	YELLOW

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
 .X = ±.2 [ .008 ]    FRACTIONS ± 1/32  
 .XX = ±.02 [ .51 ]    ANGLES ± 1°  
 .XXX = ±.005 [ .13 ]

CABLE LENGTH (L), TOLERANCES:  
 L ≤ 12 [305] = +1 [25] / -0  
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	HBAKKE	PE3C8818/ZZ	A

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