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# 75 Ohm HD-BNC Male to 75 Ohm HD-BNC Male 6G SDI Cable 300 Inch Length Using 75 Ohm 1855A-GR Coax

## RF Cable Assemblies Technical Data Sheet PE3C8873/GR-300

### Configuration

- Connector 1: HD-BNC Male
- Connector 2: HD-BNC Male
- Cable Type: Belden 1855A-GR

### 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 PE3C8873/GR-300 75 ohm HD-BNC male to 75 ohm HD-BNC male 300 inch cable using 75 ohm 1855A-GR 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 HD-BNC to HD-BNC cable assembly has a male to male gender configuration with 75 ohm flexible Belden 1855A-GR coax. The PE3C8873/GR-300 HD-BNC male to HD-BNC 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 HD-BNC Male to 75 Ohm HD-BNC Male 6G SDI Cable 300 Inch Length Using 75 Ohm 1855A-GR Coax PE3C8873/GR-300

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## RF Cable Assemblies Technical Data Sheet PE3C8873/GR-300

### Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|---|---|---|---|---|
| Frequency Range | DC | | 6 | GHz |
| VSWR | | | 1.5:1 | |
| Velocity of Propagation | | 82 | | % |
| Group Delay | | 1.22 [4] | | ns/ft [ns/m] |
| Capacitance | | 16.3 [53.48] | | pF/ft [pF/m] |
| Inductance | | 0.107 [0.35] | | uH/ft [uH/m] |
| DC Resistance Inner Conductor | | 20.1 [65.94] | | Ω/1000ft [Ω/Km] |
| DC Resistance Outer Conductor | | 3.7 [12.14] | | Ω/1000ft [Ω/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.) | 1.5 | 2.08 | 2.9 | 4.6 | 7.43 | 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* | 300 in [762 cm] |
| Weight | 0.6 lbs [272.16 g] |

**Cable**

| | |
|---|---|
| Cable Type | Belden 1855A-GR |
| 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, Green |
| Jacket Diameter | 0.159 in [4.04 mm] |

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## RF Cable Assemblies Technical Data Sheet PE3C8873/GR-300

### Connectors

| Description | Connector 1 | Connector 2 |
|---|---|---|
| Type | HD-BNC Male | HD-BNC 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, Nickel | Brass, Nickel |
| Outer Conductor Plating Specification | 100 µin minimum | 100 µin minimum |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Specification | 100 µin minimum | 100 µin minimum |

### Environmental Specifications

**Temperature**

Operating Range -30 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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## RF Cable Assemblies Technical Data Sheet PE3C8873/GR-300

### How to Order

Part Number Configuration: **PE3C8873/GR - xx uu**

- uu — Unit of Measure: cm = Centimeters, <blank> = Inches
- xx — Length
- PE3C8873/GR — Base Number

Example: PE3C8873/GR-12 = 12 inches long cable
PE3C8873/GR-100cm = 100 cm long cable

75 Ohm HD-BNC Male to 75 Ohm HD-BNC Male 6G SDI Cable 300 Inch Length Using 75 Ohm 1855A-GR 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 HD-BNC Male to 75 Ohm HD-BNC Male 6G SDI Cable 300 Inch Length Using 75 Ohm 1855A-GR Coax PE3C8873/GR-300

URL: https://www.pasternack.com/75-ohm-hd-bnc-male-to-75-ohm-hd-bnc-male-6g-sdi-cable-300-inch-length-using-1855a-gr-pe3c8873-gr-300-p.aspx

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

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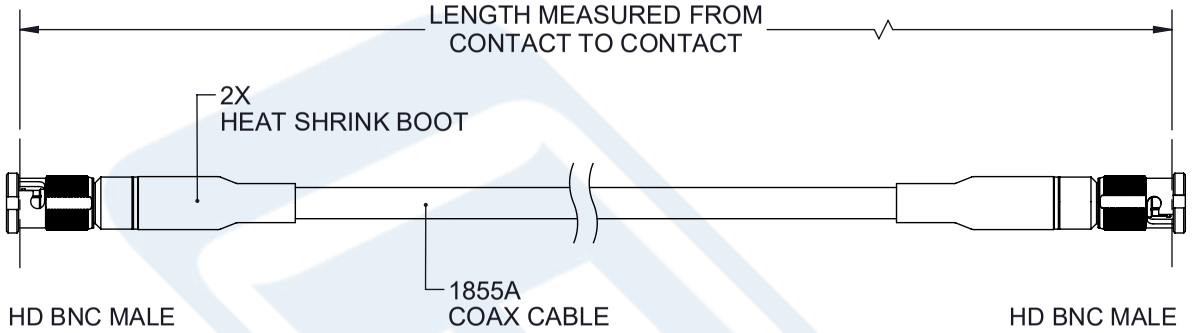
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# PE3C8873/GR-300 CAD Drawing

75 Ohm HD-BNC Male to 75 Ohm HD-BNC Male 6G SDI Cable
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| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 4/29/22 | AGANWANI |




| PE3C8873/ZZ (ZZ = CABLE COLOR DESIGNATION) | COAX CABLE COLOR |
|---|---|
| PE3C8873/BK | BLACK |
| PE3C8873/BL | BLUE |
| PE3C8873/BR | BROWN |
| PE3C8873/GR | GREEN |
| PE3C8873/GY | GRAY |
| PE3C8873/OR | ORANGE |
| PE3C8873/RD | RED |
| PE3C8873/VL | VIOLET |
| PE3C8873/WH | WHITE |
| PE3C8873/YW | YELLOW |

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

TOLERANCES:

.X = ± .2 [5.08] | 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%L / -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 | PE3C8873/ZZ | A |

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