



## SMP Female Right Angle to BNC Female Bulkhead Cable 48 Inch Length Using RG178 Coax with HeatShrink, LF Solder

### RF Cable Assemblies Technical Data Sheet

PE3W02100LF/HS-48

#### Configuration

- Connector 1: SMP Female Right Angle
- Connector 2: BNC Female Bulkhead
- Cable Type: RG178

#### Features

- Max Frequency 3 GHz
- 70% Phase Velocity
- FEP Jacket

#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W02100LF/HS-48 SMP female right angle to BNC female bulkhead 48 inch cable using RG178 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 SMP to BNC cable assembly has a female to female gender configuration with 50 ohm flexible RG178 coax. The PE3W02100LF/HS-48 SMP female to BNC female cable assembly operates to 3 GHz. The right angle SMP interface on the RG178 cable allows for easier connections in tight spaces. Our RF cable assembly with BNC bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

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.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.6:1	
Velocity of Propagation		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle to BNC Female Bulkhead Cable 48 Inch Length Using RG178 Coax with HeatShrink, LF Solder PE3W02100LF/HS-48](#)



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### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	3	GHz
Insertion Loss (Max.)	1.13	1.52	2.08	2.59	3.44	dB

### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.3dB of connector loss.

### Mechanical Specifications

#### Cable Assembly

Length*	48 in [121.92 cm]
Diameter	0.689 in [17.5 mm]

#### Cable

Cable Type	RG178
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Shield Layer 1	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.072 in [1.83 mm]

Repeated Minimum Bend Radius	0.394 in [10.01 mm]
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### Connectors

Description	Connector 1	Connector 2
Type	SMP Female Right Angle	BNC Female Bulkhead
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Phosphor Bronze, Gold
Contact Plating Specification	MIL-DTL-45204	
Dielectric Type	PTFE	Teflon
Outer Conductor Material and Plating	Beryllium Copper, Gold	
Body Material and Plating	Brass, Gold	Brass, Nickel
Body Plating Specification	MIL-DTL-45204	

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Mechanical Specification Notes:

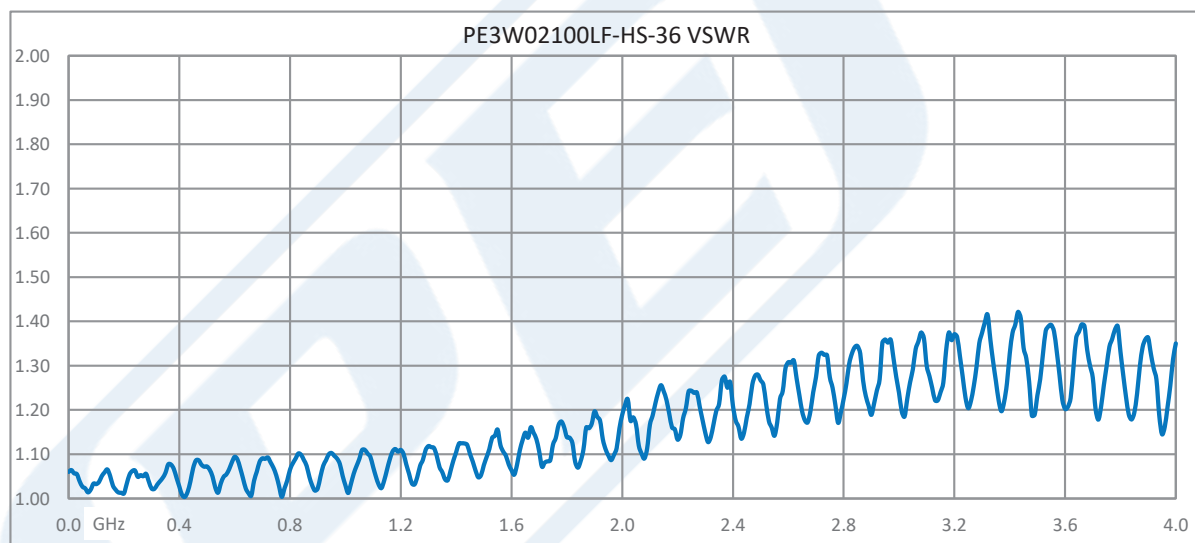
\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8"$ , whichever is greater.

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

**Plotted and Other Data**

Notes:

**Typical Performance Data**



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**How to Order**

Part Number Configuration:

**PE3W02100LF/HS - xx**

**uu**

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

Example: PE3W02100LF/HS-12 = 12 inches long cable  
PE3W02100LF/HS-100cm = 100 cm long cable

SMP Female Right Angle to BNC Female Bulkhead Cable 48 Inch Length Using RG178 Coax with HeatShrink, LF Solder 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: [SMP Female Right Angle to BNC Female Bulkhead Cable 48 Inch Length Using RG178 Coax with HeatShrink, LF Solder PE3W02100LF/HS-48](https://www.pasternack.com/smp-female-bnc-female-rg178bu-cable-assembly-pe3w02100lf-hs-48-p.aspx)

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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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**\*\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES**



**PASTERNAK<sup>®</sup>**  
THE ENGINEER'S RF SOURCE

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**DWG TITLE**

PE3W02100LF/HS

NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME
3. DIMENSIONS ARE IN INCHES [mm].

**CAD FILE** 09/27/18

SCALE N/A

**SIZE A**

CN2379