

## SMA Male to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink, LF Solder



### PE3W05173LF/HS

#### Configuration

- Connector 1: SMA Male
- Connector 2: Push-On SMP Female Right Angle
- Cable Type: LMR-100A
- Coax Flex Type: Flexible

#### Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W05173LF/HS SMA male to SMP female push-on right angle cable using LMR-100 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 SMA to SMP cable assembly has a male to female gender configuration with 50 ohm flexible LMR-100A coax. The PE3W05173LF/HS SMA male to SMP female cable assembly operates to 3 GHz. The right angle SMP interface on the LMR-100A cable allows for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

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			1.4:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]

SMA Male to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink, LF Solder



**PE3W05173LF/HS**

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Jacket Spark			2,000	Vrms

**Specifications by Frequency**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W05173LF/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.064	0.115	0.165	0.24	0.432	dB/ft	
			0.21	0.38	0.55	0.79	1.42	dB/m	
PE3W05173LF/HS-24	24 In	Insertion Loss (Typ.)	0.43	0.53	0.63	0.78	1.17	dB	0.037
PE3W05173LF/HS-36	36 In	Insertion Loss (Typ.)	0.5	0.65	0.8	1.02	1.6	dB	0.046
PE3W05173LF/HS-48	48 In	Insertion Loss (Typ.)	0.56	0.76	0.96	1.26	2.03	dB	0.055
PE3W05173LF/HS-100CM	100 CM	Insertion Loss (Typ.)	0.51	0.68	0.85	1.09	1.72	dB	0.049
PE3W05173LF/HS-200CM	200 CM	Insertion Loss (Typ.)	0.72	1.06	1.39	1.88	3.14	dB	0.079

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.1 dB
Loss due to Connector 2:	0.2 dB
Base Weight:	0.028 pounds
Additional Weight per Inch:	0.00075 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter	0.5 in [12.7 mm]
Weight	0.0185 lbs [8.39 g]

**Cable**

Cable Type	LMR-100A
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]
One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

SMA Male to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink, LF Solder



**PE3W05173LF/HS**

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	SMP Female Right Angle
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Connection Method		Push-On
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification		30µ in. minimum
Dielectric Type	PTFE	Teflon
Outer Conductor Material and Plating		Beryllium Copper, Gold
Outer Conductor Plating Specification		3µ in. minimum
Body Material and Plating	Brass, Gold	Brass, Gold
Body Plating Specification		3µ in. minimum
Coupling Nut Material and Plating	Brass, Gold	
Hex Size	5/16 in	
Torque	5 in-lbs 0.57 Nm	

**Environmental Specifications**

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

**Plotted and Other Data**

Notes:

SMA Male to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink, LF Solder



**PE3W05173LF/HS**

**Typical Performance Data**

**How to Order**

Part Number Configuration:

**PE3W05173LF/HS - xx uu**



Example: PE3W05173LF/HS-12 = 12 inches long cable  
PE3W05173LF/HS-100cm = 100 cm long cable

SMA Male to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 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: [SMA Male to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink, LF Solder PE3W05173LF/HS](#)

URL: <https://www.pasternack.com/sma-male-to-push-on-smp-female-low-loss-cable-using-lmr-100-with-heatshrink-lf-solder-pe3w05173lf-hs-p.aspx>

The information contained within 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 impliment improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

# PE3W05173LF/HS CAD Drawing

SMA Male to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink, LF Solder

