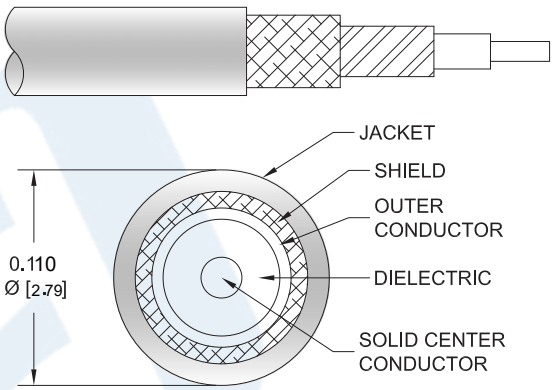
PASTERNACK
an INFINITE brand

Push-On SMP Female Right Angle to SMA Male Low Loss Cable Using LMR-100 Coax

RF Cable Assemblies Technical Data Sheet PE3W05173

Configuration

- Connector 1: Push-OnSMP Female Right Angle
- Connector 2: SMA Male
- Cable Type: LMR-100A



Features

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

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W05173 SMP female push-on right angle to SMA male 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 SMP to SMA cable assembly has a female to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3W05173 SMP female to SMA male 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Push-On SMP Female Right Angle to SMA Male Low Loss Cable Using LMR-100 Coax PE3W05173

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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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]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω/1000ft [Ω/Km]
Jacket Spark			2,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.07	0.115	0.165	0.24	0.434	dB/ft
	0.23	0.38	0.54	0.79	1.42	dB/m

Electrical Specification Notes:
Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the SMA male connector and 0.2 dB for the SMP female connector.

Mechanical Specifications

Cable Assembly

Weight	0.028 lbs [12.7 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

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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]

Connectors

Description	Connector 1	Connector 2
Type	SMP Female Right Angle	SMA Male
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Connection Method	Push-On	
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	30µ in. minimum	
Dielectric Type	Teflon	PTFE
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]

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration: **PE3W05173 - xx uu**

- uu — Unit of Measure: cm = Centimeters, <blank> = Inches
- xx — Length
- PE3W05173 — Base Number

Example: PE3W05173-12 = 12 inches long cable
PE3W05173-100cm = 100 cm long cable

Push-On SMP Female Right Angle to SMA Male Low Loss Cable Using LMR-100 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: Push-On SMP Female Right Angle to SMA Male Low Loss Cable Using LMR-100 Coax PE3W05173

URL: https://www.pasternack.com/push-on-smp-female-right-angle-to-sma-male-low-loss-cable-using-lmr-100-pe3w05173-p.aspx

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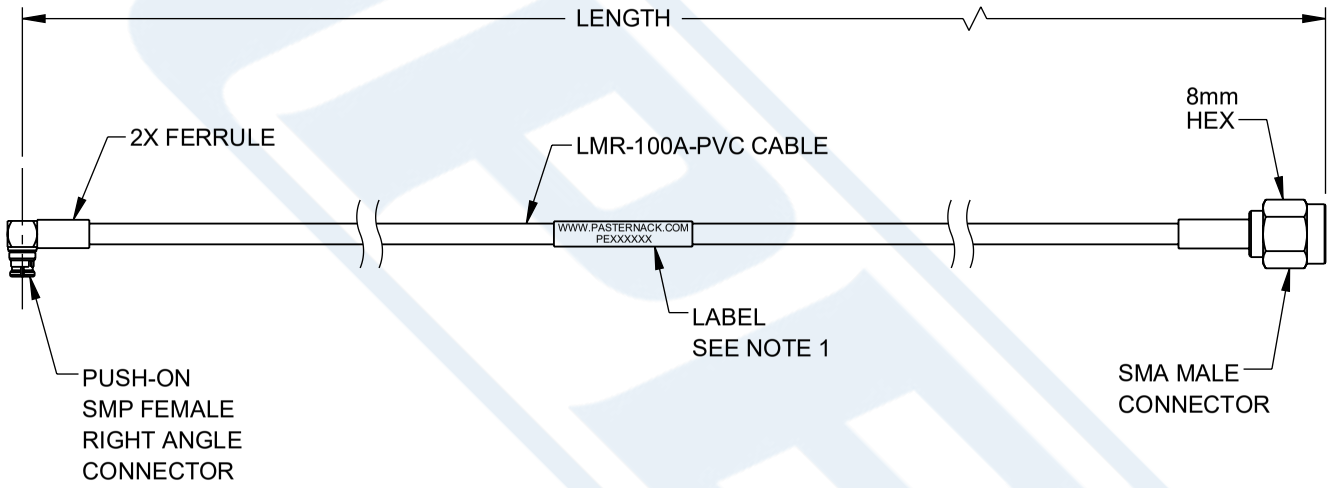
PE3W05173 CAD Drawing

Push-On SMP Female Right Angle to SMA Male Low Loss Cable Using LMR-100 Coax

REVISION					
ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	04/13/2023	BPUCHASKI	AGANWANI



NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS , ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY

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

TOLERANCES:

.X = ± .2 [5]
.XX = ± .02 [.5]
.XXX = ± .005 [.13]

FRACTIONS ± 1/32
ANGLES ± 1°

CABLE LENGTH TOLERANCES:

≤12 [305] = +1 [25] / -0
>12 [305] ≤ 60 [1524] = +2 [51] / -0
>60 [1524] ≤ 120 [3048] = +4 [102] / -0
>120 [3048] ≤ 300 [7620] = +6 [152] / -0
>300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE	SHEET
NONE	1 OF 1

DESCRIPTION: Push-On SMP Female Right Angle to SMA Male Low Loss Cable Using LMR-100 Coax

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	BPUCHASKI	PE3W05173	A

PE3W05173 REV 1.0

T-Rev.D2