

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



### RF Cable Assemblies Technical Data Sheet

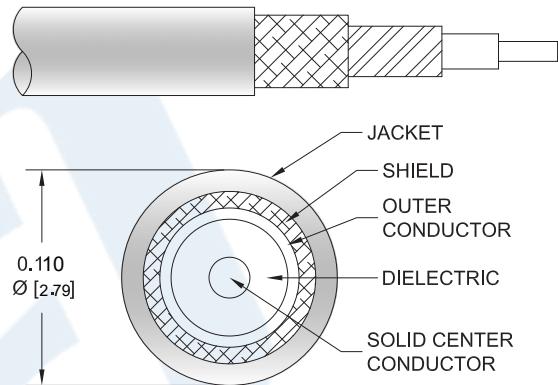
**PE3W11780**

#### Configuration

- Connector 1: N Male Right Angle
- Connector 2: Push-OnSMP Female Right Angle
- 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 PE3W11780 type N male right angle 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 type N to SMP cable assembly has a male to female gender configuration with 50 ohm flexible LMR-100A coax. The PE3W11780 type N male to SMP female cable assembly operates to 3 GHz. The right angle type N and right angle SMP interfaces on the LMR-100A cable allow 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: [N Male Right Angle to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax PE3W11780](#)



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

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**PE3W11780**

#### 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 0.2 dB per connector.

#### Mechanical Specifications

##### Cable Assembly

Weight 0.125 lbs [56.7 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  
Jacket Material PVC, Black  
Jacket Diameter 0.11 in [2.79 mm]

One Time Minimum Bend Radius 0.25 in [6.35 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Right Angle to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax PE3W11780](#)



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

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**PE3W11780**

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	N Male Right Angle	SMP Female Right Angle
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Connection Method		Push-On
Mating Cycles	500	
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, Tri-Metal	Brass, Gold
Body Plating Specification		3µ in. minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	

#### Environmental Specifications

##### Temperature

Operating Range

-40 to +85 deg C

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

#### Plotted and Other Data

Notes:

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



**RF Cable Assemblies Technical Data Sheet**

**PE3W11780**

**How to Order**

Part Number Configuration:

**PE3W11780**

- **xx**

**uu**

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

Example: PE3W11780-12 = 12 inches long cable  
PE3W11780-100cm = 100 cm long cable

N Male Right Angle to Push-On SMP Female Right Angle 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: [N Male Right Angle to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax PE3W11780](#)

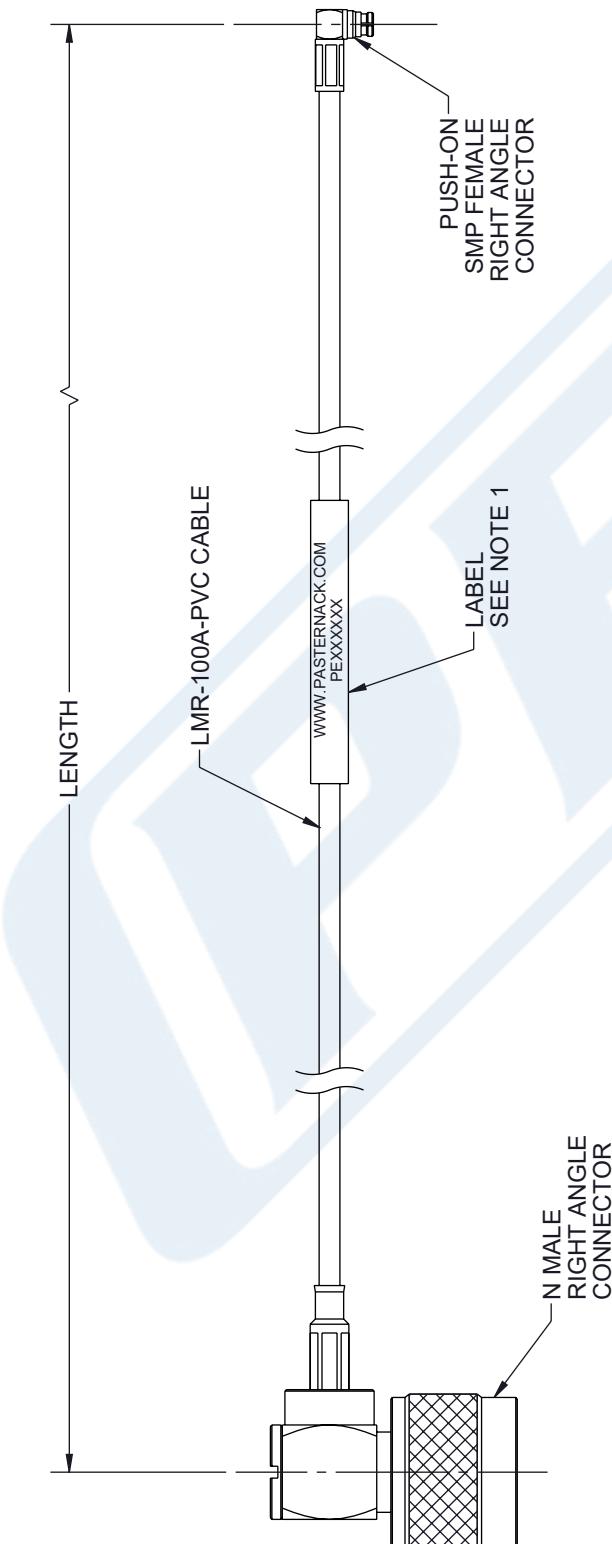
URL: <https://www.pasternack.com/n-male-right-angle-to-push-on-smp-female-low-loss-cable-using-lmr-100-pe3w11780-p.aspx>

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PE3W11780 CAD Drawing

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

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REVISION					
ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	01/03/2023	HBAKKE	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. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
TOLERANCES: $\pm 0.2$ [5] $\pm 0.02$ [5] $\pm 0.005$ [1.3]		SCALE NONE 1 OF 1	
FRACTIONS $\frac{1}{32}$ $\frac{1}{128}$		SHEET A	
CABLE LENGTH TOLERANCES: $\pm 12$ [305] = $\pm 12$ [305] - 0 $\pm 12$ [305] $\leq$ 50 [1250] = $\pm 2$ [50] - 0 $\geq 60$ [1524] $\leq$ 120 [3048] = $\pm 4$ [102] - 0 $\geq 120$ [3048] $\leq$ 300 [7620] = $\pm 6$ [152] - 0 $\geq 300$ [7620] = $\pm 5$ [125] - 0		DESCRIPTION N Male Right Angle to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax	
SIZE	CAGE CODE	DRAWN BY	REV
A	53919	HBAKKE	A
ITEM NO. PE3VW11780		ALL DIMENSIONS ARE INCHES AND SUBJECT TO CHANGE WITHOUT NOTICE	