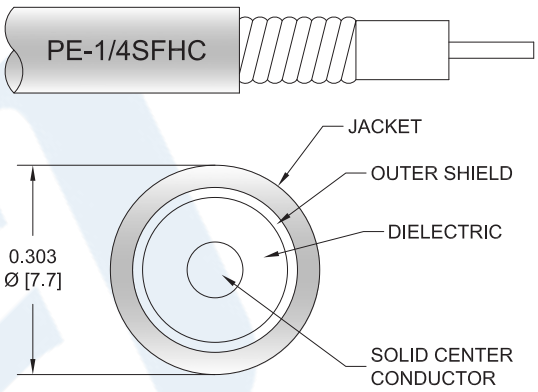
PASTERNACK
an INFINITE brand

SMA Male to N Male Low PIM Cable Using 1/4 inch Superflexible Coax

RF Cable Assemblies Technical Data Sheet PE3W11181

Configuration

- Connector 1: SMA Male
- Connector 2: N Male
- Cable Type: 1/4" Superflexible



Features

- Max Frequency 3 GHz
- Low PIM: -155 dBc Max
- Shielding Effectivity > 120 dB
- 82% Phase Velocity
- PE Jacket

Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

Description

Pasternack's PE3W11181 SMA male to type N male cable using 1/4 inch superflexible coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack SMA to type N cable assembly has a male to male gender configuration with 50 ohm corrugated 1/4" superflexible coax. The PE3W11181 SMA male to type N male cable assembly operates to 3 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -155 dBc.

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		82		%
RF Shielding	120			dB
Passive Intermodulation			-155	dBc

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 N Male Low PIM Cable Using 1/4 inch Superflexible Coax PE3W11181

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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Capacitance	24.4 [80.05]		pF/ft [pF/m]
Inductance	0.059 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conductor	3.2 [10.5]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor	2.53 [8.3]		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.)	0.016	0.027	0.039	0.058	0.107	dB/ft
	0.05	0.09	0.13	0.19	0.35	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 straight connector.

Mechanical Specifications

Cable Assembly

Weight	0.258 lbs [117.03 g]

Cable

Cable Type	1/4” Superflexible
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	PE (F)
Number of Shields	1
Shield Layer 1	Helically Corrugated Copper Tube
Jacket Material	PE, Black
Jacket Diameter	0.303 in [7.7 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Typical Flex Cycles	20
Tensile Strength	79 lbs [35.83 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	N Male
Specification		IEC 60169-16
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Silver	Spring Copper, Silver
Contact Plating Specification		5 µm minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Outer Conductor Plating Specification		5 µm minimum
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification		2 µm minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Nickel
Coupling Nut Plating Specification		5 µm minimum
Hex Size		19 mm

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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How to Order

Part Number Configuration: **PE3W11181 - xx uu**

- uu — Unit of Measure: cm = Centimeters, <blank> = Inches
- xx — Length
- PE3W11181 — Base Number

Example: PE3W11181-12 = 12 inches long cable
PE3W11181-100cm = 100 cm long cable

SMA Male to N Male Low PIM Cable Using 1/4 inch Superflexible 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: SMA Male to N Male Low PIM Cable Using 1/4 inch Superflexible Coax PE3W11181

URL: https://www.pasternack.com/sma-male-to-n-male-low-pim-cable-using-1-4-inch-superflexible-pe3w11181-p.aspx

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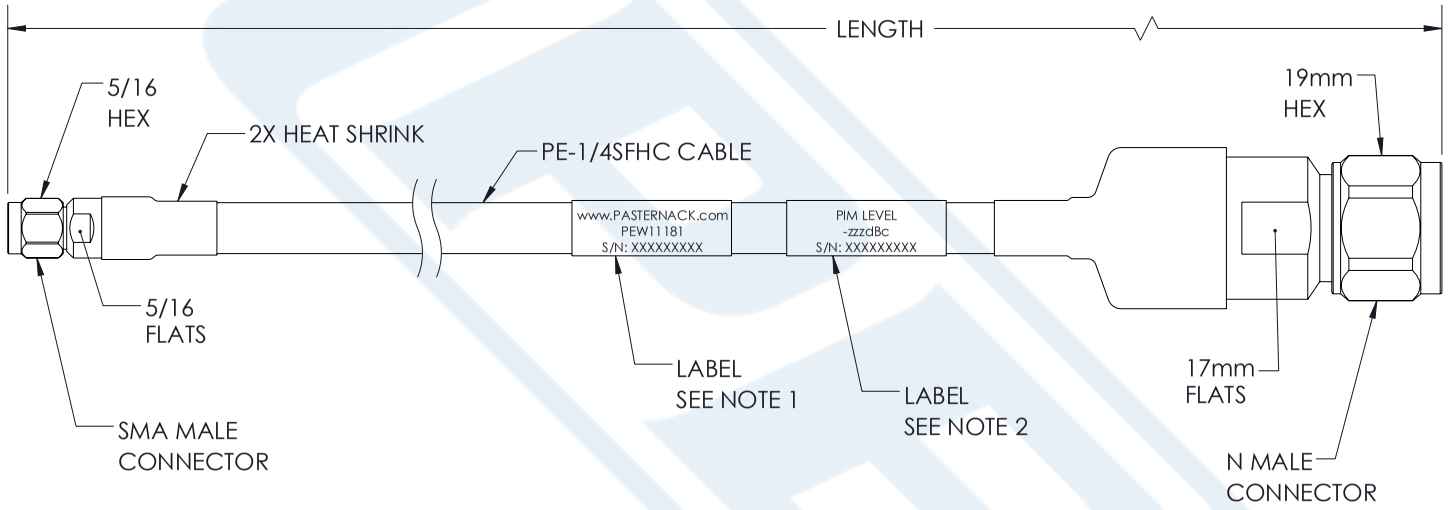
REVISION					
ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	12/14/2022		AGANWANI



NOTES:

1. CABLES 84" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END 12.0" FROM END OF CONNECTOR.

2. PLACE LABEL 6" FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.

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: SMA Male to N Male Low PIM Cable Using 1/4 inch Superflexible Coax

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	BPUCHASKI	PE3W11181	A

T-Rev.D

PE3W11181 REV A

PE3W11181 CAD Drawing
SMA Male to N Male Low PIM Cable Using 1/4 inch Superflexible Coax