

## N Female Low PIM Connector Solder Attachment for SPF-250, SPO-250, SPP-250-LLPL, 1/4" Superflexible, PE-1/4SFHC



### PE45993

#### Configuration

- N Female Connector
- 50 Ohms
- Straight Body Geometry

- Connector Interface Types: SPF-250, SPO-250, SPP-250-LLPL, 1/4" Superflexible, PE-1/4SFHC
- Low PIM Design

#### Features

- Max. Operating Frequency 11 GHz
- Silver Plated Beryllium Copper Contact

- Max of VSWR 1.12:1 at 4.1GHz, Max of VSWR 1.18:1 at 6.2GHz, Max of VSWR 1.44:1 at 11GHz
- PIM is less than -155dBc at 1.8GHz typical

#### Applications

- General Purpose Test
- Wireless Communications

- Custom Cable Assemblies
- Low PIM Applications

#### Description

Pasternack's PE45993 type N, N, Low PIM, Connector is part of our full line of RF components available for same-day shipping. Our type N female connector operates up to a maximum frequency of 11 GHz.

Our type N female connector PE45993 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		11	GHz
Dielectric Withstanding Voltage (AC)			1,600	Vrms
Impedance		50		Ohms

#### Mechanical Specifications

##### Size

Length	1.311024 in [33.3 mm]
Width	0.779528 in [19.80 mm]
Height	0.779528 in [19.8 mm]
Weight	0.06006 lbs [27.24 g]
Mating Cycles	500 Cycles

N Female Low PIM Connector Solder Attachment for SPF-250, SPO-250, SPP-250-LLPL, 1/4" Superflexible, PE-1/4SFHC



## PE45993

### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Silver
Insulation	PTFE	
Outer Conductor	Brass	Silver
Body	Brass	Silver

### Environmental Specifications

#### Temperature

Operating Range -55 to +85 deg C

Environmental Specification Notes:  
EC 61169-16

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

### Plotted and Other Data

Notes:

N Female Low PIM Connector Solder Attachment for SPF-250, SPO-250, SPP-250-LLPL, 1/4" Superflexible, PE-1/4SFHC 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.

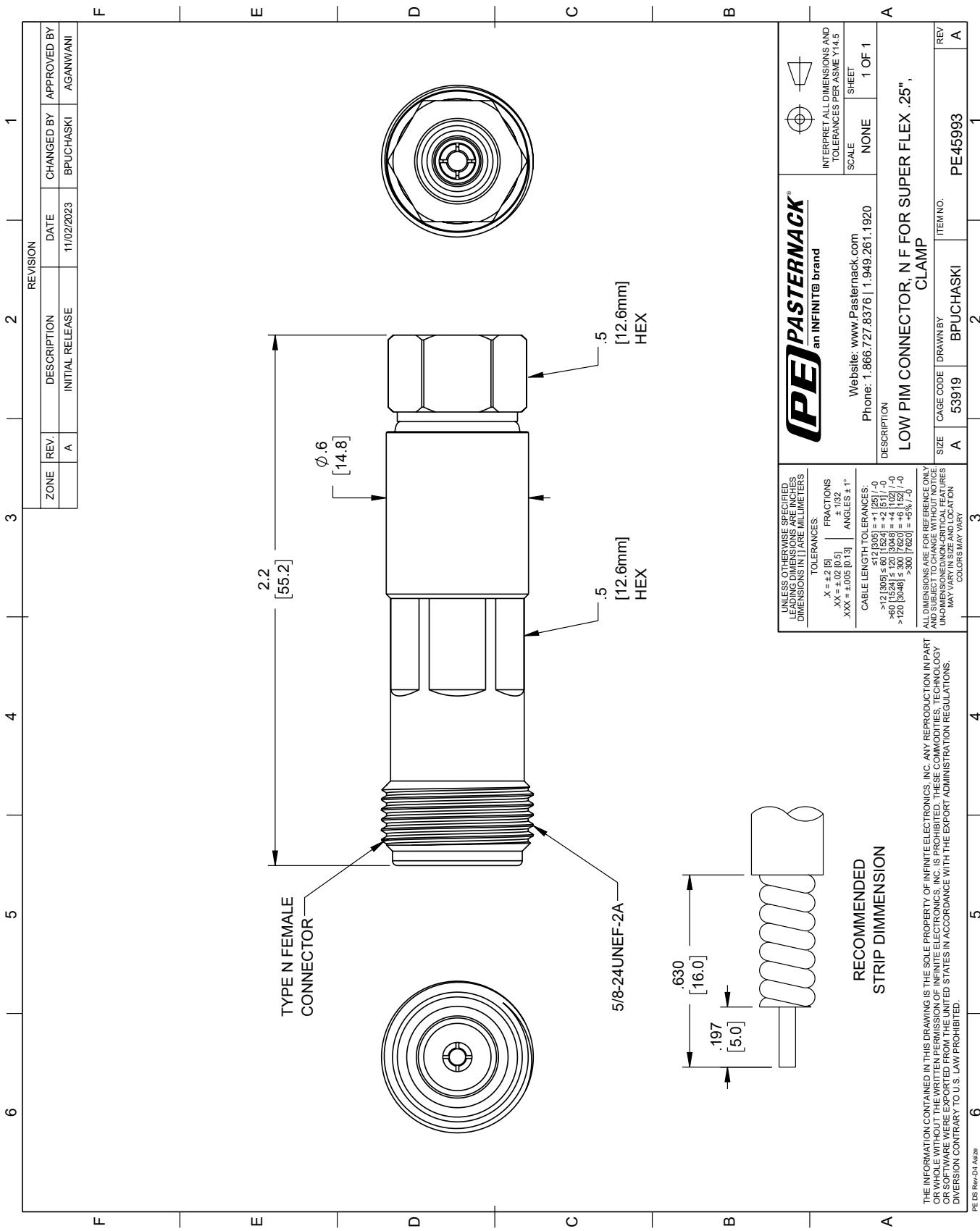
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Female Low PIM Connector Solder Attachment for SPF-250, SPO-250, SPP-250-LLPL, 1/4" Superflexible, PE-1/4SFHC PE45993](#)

URL: <https://www.pasternack.com/n-female-spf-250-spo-250-spp-250-llpl-connector-pe45993-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 implement 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.

# PE45993 CAD Drawing

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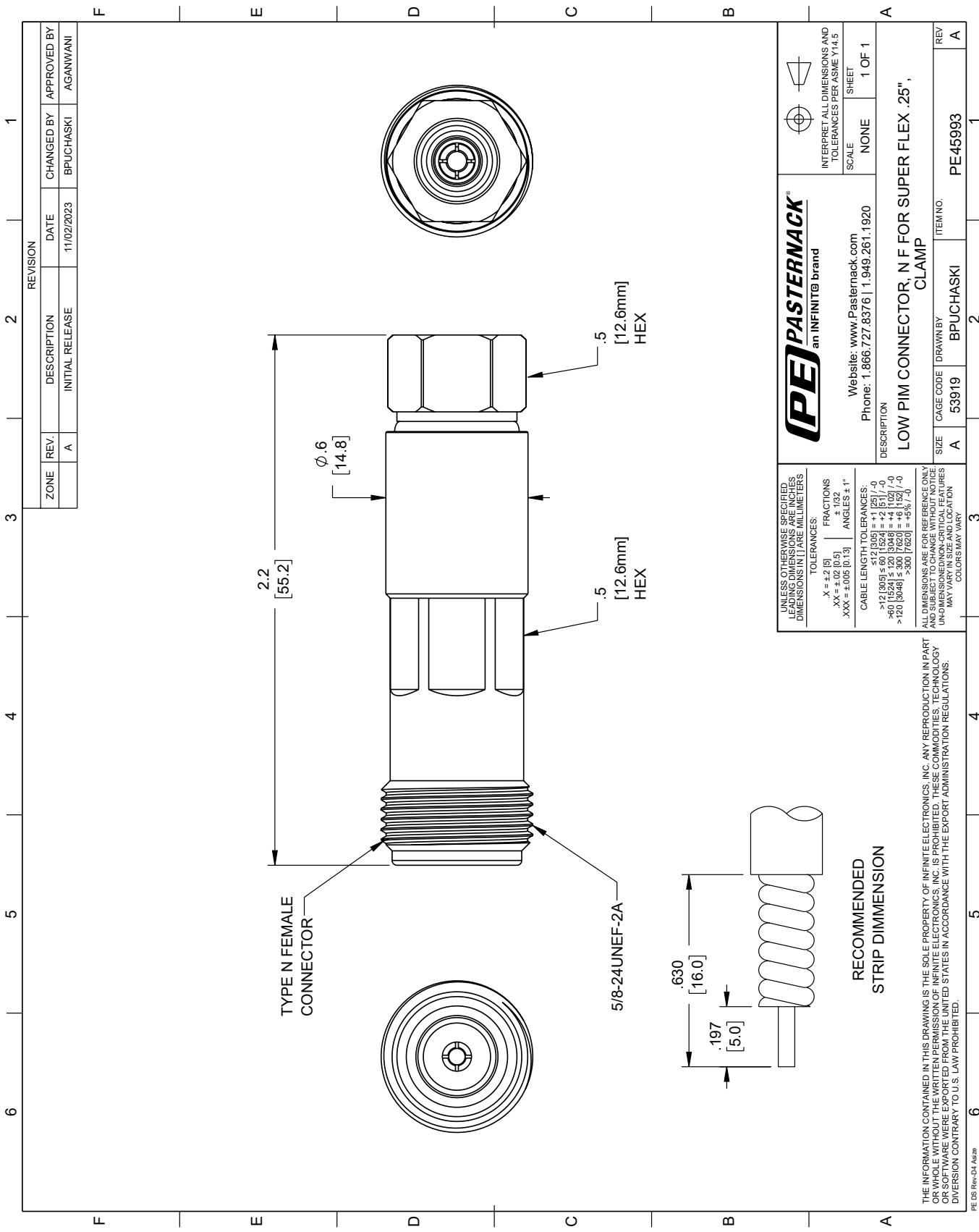
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## Low Loss 1/4 Superflexible Helical Corrugated Coax Cable with Black PE Jacket

### RF Cables Technical Data Sheet

**PE-1/4SFHC**

#### Configuration

- Low Loss Corrugated Cable
- 1 Shield(s)

#### Features

- Low Passive Intermodulation
- Solid copper outer conductor provides the highest possible RF shielding
- Excellent return loss performance
- Highly foamed dielectric provides low attenuation
- Superflexible helically corrugated copper outer conductor enables a small bending radius

#### Description

Our corrugated cables and Low PIM connector combinations result in cable assemblies with excellent Passive Intermodulation performance. Solid copper outer conductors provide the highest possible RF shielding. This Superflexible cable features excellent return loss performance. The highly foamed dielectric and optimized dimensions of these cables result in excellent low attenuation values. The Superflexible helically corrugated copper outer conductor allows for a small bending radius.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		20.4	GHz
Cutoff Frequency		25		GHz
Impedance		50		Ohms
Velocity of Propagation		82		%
Shielding Effectiveness	120			dB
Dielectric Withstanding Voltage (DC)			900	Vdc
Jacket Spark			2,000	Vrms
Inner Conductor DC Resistance			3.2	Ohms/1000ft
Outer Conductor DC Resistance			2.53	Ohms/1000ft
Nominal Capacitance	24.4 [80.05]			pF/ft [pF/m]
Nominal Inductance	0.059 [0.19]			uH/ft [uH/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss 1/4 Superflexible Helical Corrugated Coax Cable with Black PE Jacket PE-1/4SFHC](#)



## Low Loss 1/4 Superflexible Helical Corrugated Coax Cable with Black PE Jacket

### RF Cables Technical Data Sheet

**PE-1/4SFHC**

#### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.03	0.15	0.45	0.9	1.5	GHz
Attenuation, Typ	0.94	2.14	3.75	5.46	7.26	dB/100ft
	3.08	7.02	12.3	17.91	23.82	dB/100m
Input Power (CW), Max	2,090	924	520	360	278	Watts
Description	F6	F7	F8	F9	F10	Units
Frequency	1.8	2	2.2	2.5	3	GHz
Attenuation, Typ	8.02	8.52	8.99	9.67	10.73	dB/100ft
	26.31	27.95	29.49	31.73	35.2	dB/100m
Input Power (CW), Max	250	238	230	210	190	Watts

#### Mechanical Specifications

Diameter	0.303 in [7.7 mm]
Weight	0.048 lbs/ft [0.07 kg/m]
Number of Bends, Min	20
Min. Bend Radius (Installation)	0.5 in [12.7 mm]
Min. Bend Radius (Repeated)	1 in [25.4 mm]
Tensile Strength	79 lbs [35.83 kg]

#### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Aluminum, 1 Strand	0.074 in [1.88 mm]
Conductor Type	Solid	
Dielectric	PE (F)	0.187 in [4.75 mm]
First Shield	Helically Corrugated Copper Tube	0.25 in [6.35 mm]
Jacket	PE, Black	0.303 in [7.7 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss 1/4 Superflexible Helical Corrugated Coax Cable with Black PE Jacket PE-1/4SFHC](#)



## Low Loss 1/4 Superflexible Helical Corrugated Coax Cable with Black PE Jacket

### RF Cables Technical Data Sheet

PE-1/4SFHC

#### Environmental Specifications

##### Temperature

Operating Range

-55 to +85 deg C

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

#### Plotted and Other Data

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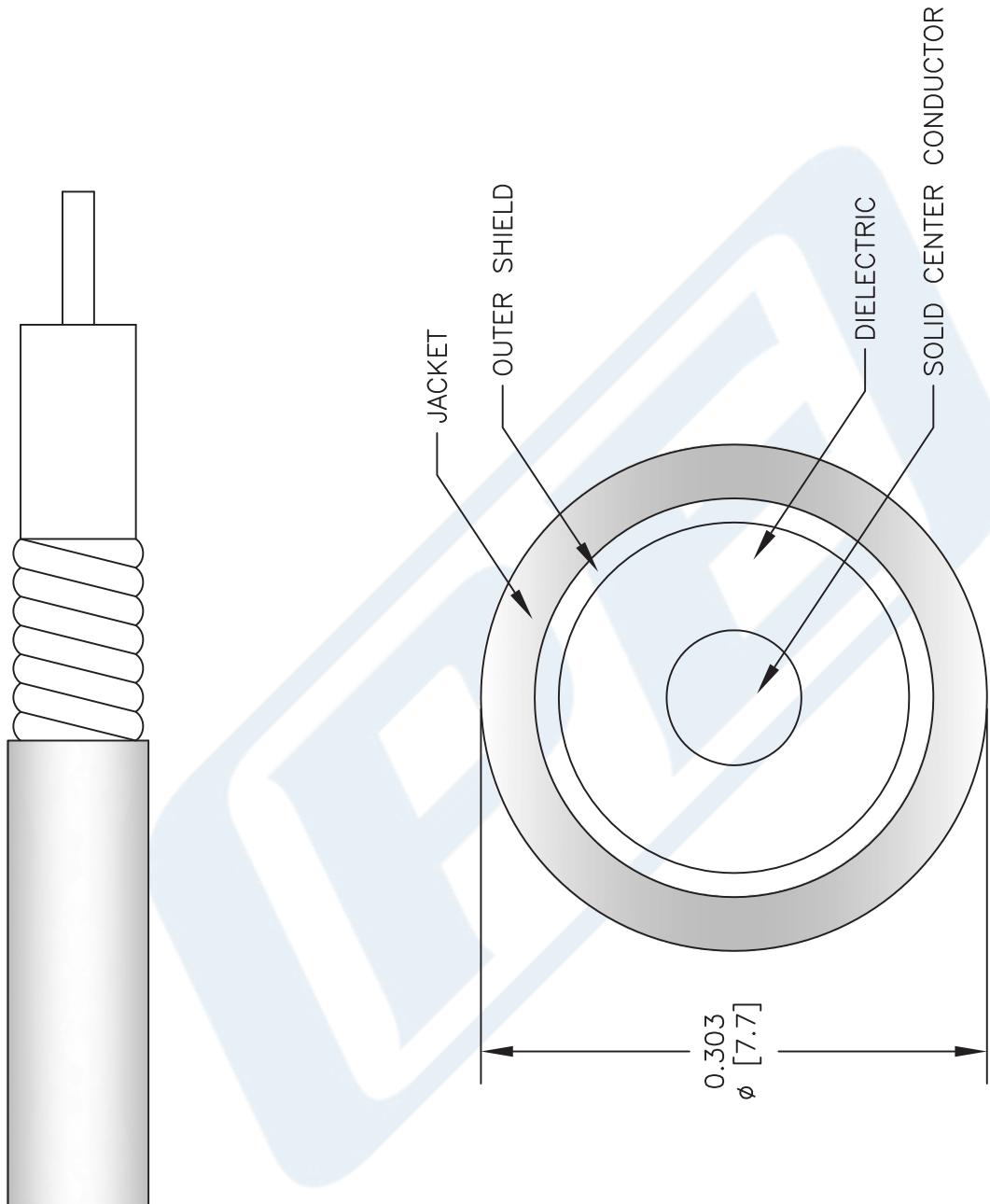
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URL: <https://www.pasternack.com/50-ohm-low-loss-corrugated-1-4-superflexible-helical-coax-pe-1-4sfhc-p.aspx>

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# PE-1/4SFHC CAD Drawing

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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].

PASTERNAK®	DWG TITLE
	<b>PE-1/4SFHC</b>

FSCM NO. 53919	CAD FILE 092112	SCALE N/A	SIZE A	2233
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