



## N Male Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/4 inch Superflexible, PE-1/4SFHC, IP67 Rated

### RF Connectors Technical Data Sheet

PE44726

#### Configuration

- N Male Connector
- IEC 60169-16
- 50 Ohms
- Straight Body Geometry
- 1/4 inch Superflexible, PE-1/4SFHC Interface Type
- Clamp/Non-Solder Contact Attachment
- 19 mm Hex
- Low PIM Design

#### Features

- Max. Operating Frequency 3 GHz
- Excellent VSWR of 1.1:1
- PIM levels lower than -160 dBc
- Silver Plated Spring Copper Contact
- 5 µm minimum contact plating
- IP67 Rated

#### Applications

- General Purpose Test
- Wireless Communications
- Custom Cable Assemblies
- Low PIM Applications

#### Description

Pasternack's PE44726 type N male low PIM connector with clamp/non-solder contact attachment for 1/4 inch Superflexible and PE-1/4SFHC is part of our full line of RF components available for same-day shipping. Our type N male connector operates up to a maximum frequency of 3 GHz and offers excellent VSWR of 1.1:1. The type N male connector also has low passive intermodulation of -160 dBc. The connector has an IP67 rating to protect against dust and temporary moisture protection under immersion conditions.

Our type N male connector PE44726 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		3	GHz
VSWR			1.1:1	
Insertion Loss			0.1	dB
Passive Intermodulation using 2x20W tones			-160	dBc
Operating Voltage (DC)			1,700	Vdc
Dielectric Withstanding Voltage (DC)			2,500	Vdc
Insulation Resistance	5,000			MOhms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/4 inch Superflexible, PE-1/4SFHC, IP67 Rated PE44726](#)



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RF Connectors Technical Data Sheet

PE44726

**Mechanical Specifications**

**Size**

Length 1.96 in [49.78 mm]  
Width/Dia. 0.748 in [19.00 mm]  
Weight 0.6 lbs [272.16 g]

**Material Specifications**

Description	Material	Plating
Contact	Spring Copper	Silver 5 µm minimum
Insulation	PTFE	
Outer Conductor	Brass	Nickel 5 µm minimum
Body	Brass	Tri-Metal 2 µm minimum
Coupling Nut	Brass	Nickel 5 µm minimum

**Environmental Specifications**

**Temperature**

Operating Range -40 to +85 deg C  
Ingress Protection (IP) Rating IP67 Rated  
Shock IEC 60068-2-27  
Vibration IEC 60068-2-6-Fc  
Thermal Shock IEC 60068-2-14-Na

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N Male Low PIM Connector Clamp/Non-Solder Contact  
Attachment for 1/4 inch Superflexible, PE-1/4SFHC, IP67 Rated

RF Connectors Technical Data Sheet

PE44726

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

**Plotted and Other Data**

Notes:

N Male Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/4 inch Superflexible, PE-1/4SFHC, IP67 Rated from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

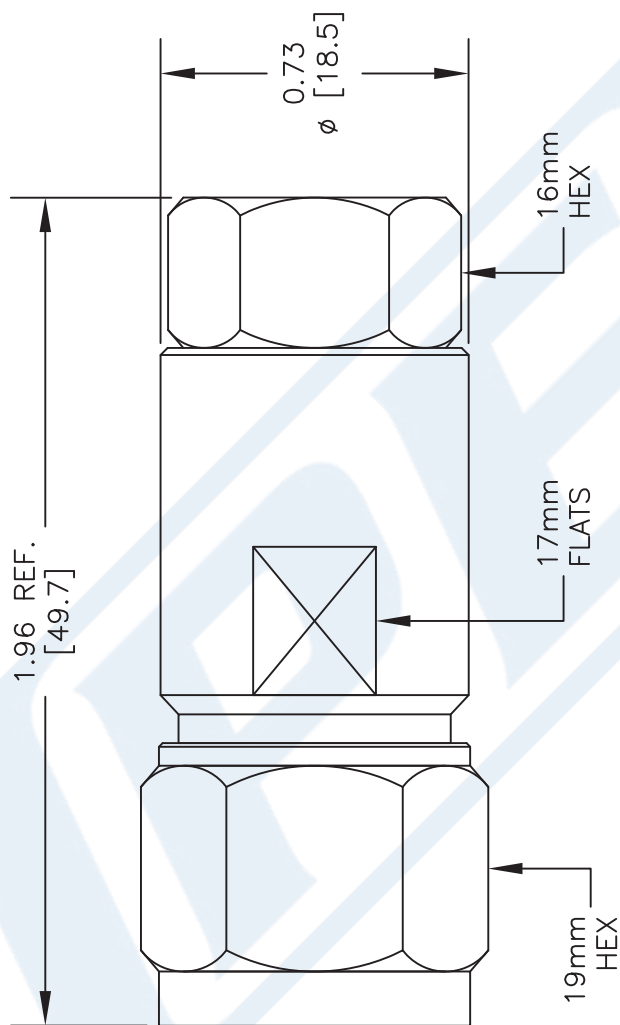
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URL: <https://www.pasternack.com/n-male-standard-1-4-inch-super-flexible-pe-1-4sfhc-connector-pe44726-p.aspx>

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# PE44726 CAD Drawing

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for 1/4 inch Superflexible, PE-1/4SFHC, IP67 Rated



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2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE

**PE44726**

REV. -

FSCM NO. 53919

DATE 081412

SCALE N/A

SIZE A

2233

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**COAXIAL & FIBER OPTICS**





## N Female Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/4 inch Superflexible, PE-1/4SFHC, IP67 Rated

### RF Connectors Technical Data Sheet

PE44727

#### Configuration

- N Female Connector
- IEC 60169-16
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: 1/4 inch Superflexible, PE-1/4SFHC
- Low PIM Design

#### Features

- Max. Operating Frequency 3 GHz
- Excellent VSWR of 1.1:1
- PIM levels lower than -160 dBc
- Silver Plated Spring Copper Contact
- 5  $\mu$ m minimum contact plating
- IP67 Rated

#### Applications

- General Purpose Test
- Wireless Communications
- Custom Cable Assemblies
- Low PIM Applications

#### Description

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RF Connectors  
 Technical Data Sheet

PE44727

**Mechanical Specifications**

<b>Size</b>	
Length	1.87 in [47.5 mm]
Width/Dia.	0.63 in [16.00 mm]
Weight	0.164 lbs [74.39 g]
Mating Cycles	500 Cycles

**Material Specifications**

Description	Material	Plating
Contact	Spring Copper	Silver 5 µm minimum
Insulation	PTFE	
Outer Conductor	Brass	Nickel 5 µm minimum
Body	Brass	Tri-Metal 2 µm minimum

**Environmental Specifications**

<b>Temperature</b>	
Operating Range	-40 to +85 deg C
Ingress Protection (IP) Rating	IP67 Rated
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6-Fc
Thermal Shock	IEC 60068-2-14-Na

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

**Plotted and Other Data**

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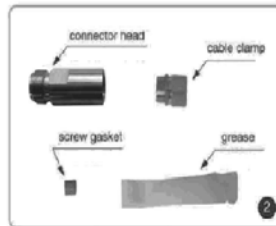
RF Connectors  
Technical Data Sheet

PE44727

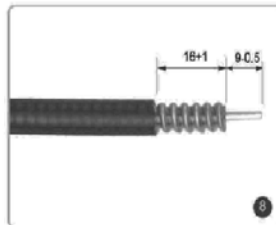
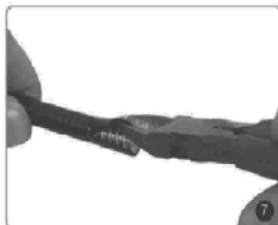
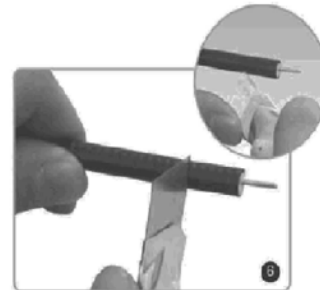
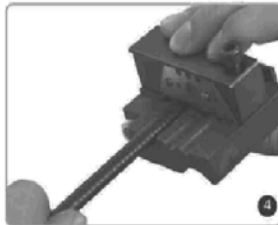
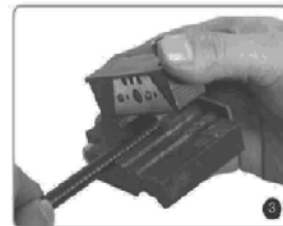
Assembly Instruction



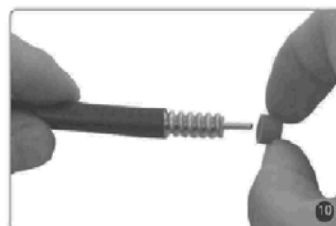
Assembly tools (recommended).



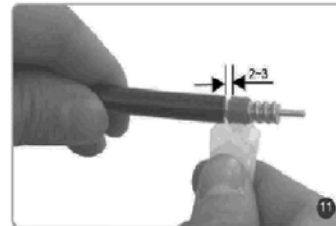
Connector Components.



Chamfer inner conductor 0.5 × 45° with flat file.



Put the screw gasket onto the cable, pay attention to the correct direction of the screw gasket. The angle direction towards the front.



Wipe the gasket with grease.

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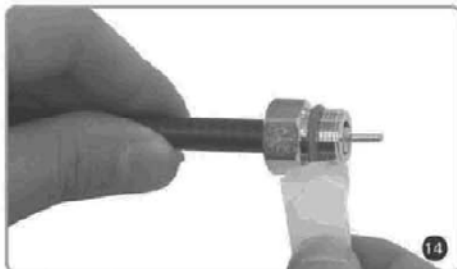


RF Connectors  
Technical Data Sheet

PE44727



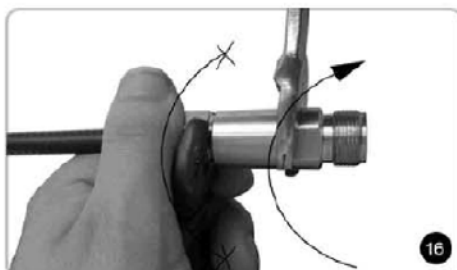
The front sawing edges of clamp and outer conductor should be flat.



Wipe the O-ring with grease.



screw the connector head onto the connector end.



Keep the clamp steady, screw the connector head onto the cable tightly. Recommended torque is 15 N·m.



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RF Connectors  
Technical Data Sheet

PE44727

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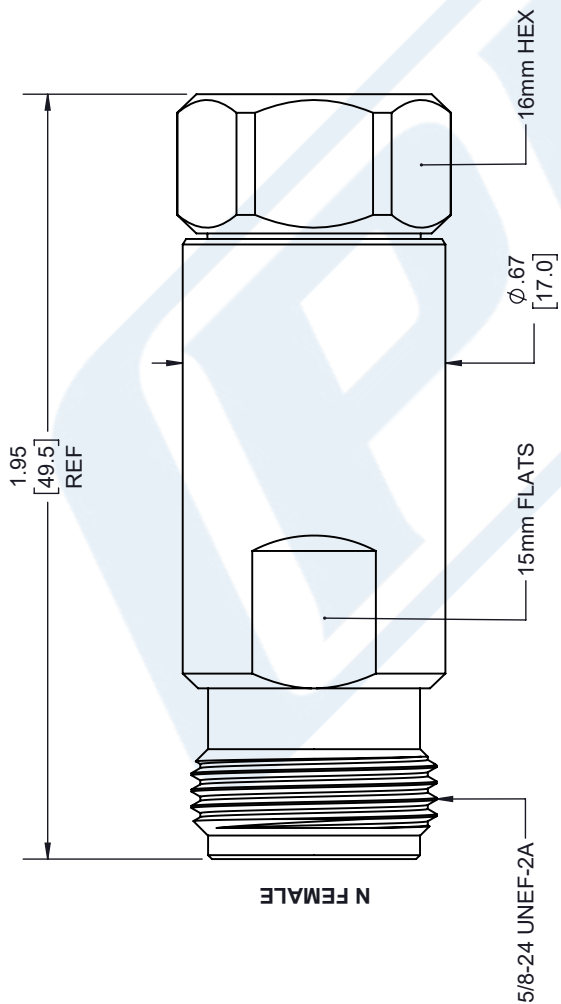
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# PE44727 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	10/28/2020	S. ELLIS



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

TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS ± 1/32
.XX = ±.02 [.51]	ANGLES ± 1°
.XXX = ±.005 [.13]	

CABLE LENGTH (L), TOLERANCES:

L ≤ 12 [305]	±.1 [25] / -0
12 [305] < L ≤ 60 [1524]	±.2 [51] / -0
60 [1524] < L ≤ 120 [3048]	±.4 [102] / -0
120 [3048] < L ≤ 300 [7620]	±.6 [152] / -0
300 [7620] < L	±.5% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

**PE PASTERNAK**  
an INFINITE brand

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E-mail: sales@pasternack.com

THIRD-ANGLE PROJECTION

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SHEET 1 OF 3

SCALE N/A

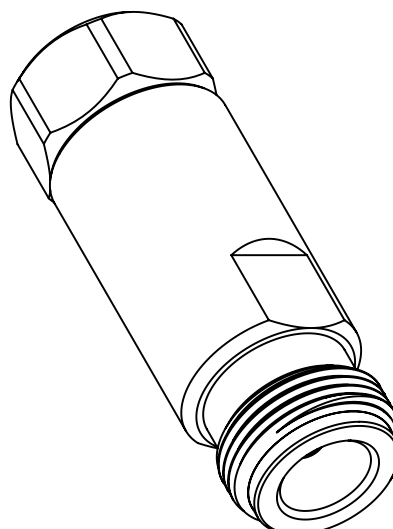
REV N/A

ITEM NO. PE44727

DRAWN BY K.DANG

SIZE A

CAGE CODE 53919



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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
- Superflexible helically corrugated copper outer conductor enables a small bending radius
- Excellent return loss performance
- Highly foamed dielectric provides low attenuation

#### 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 Strands	0.075 in [1.91 mm]
Conductor Type	Solid	
Dielectric	PE (F)	0.173 in [4.39 mm]
First Shield	Helically Corrugated Copper Tube	
Jacket	PE, Black	0.303 in [7.7 mm]

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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

#### Environmental Specifications

##### Temperature

Operating Range

-55 to +85 deg C

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

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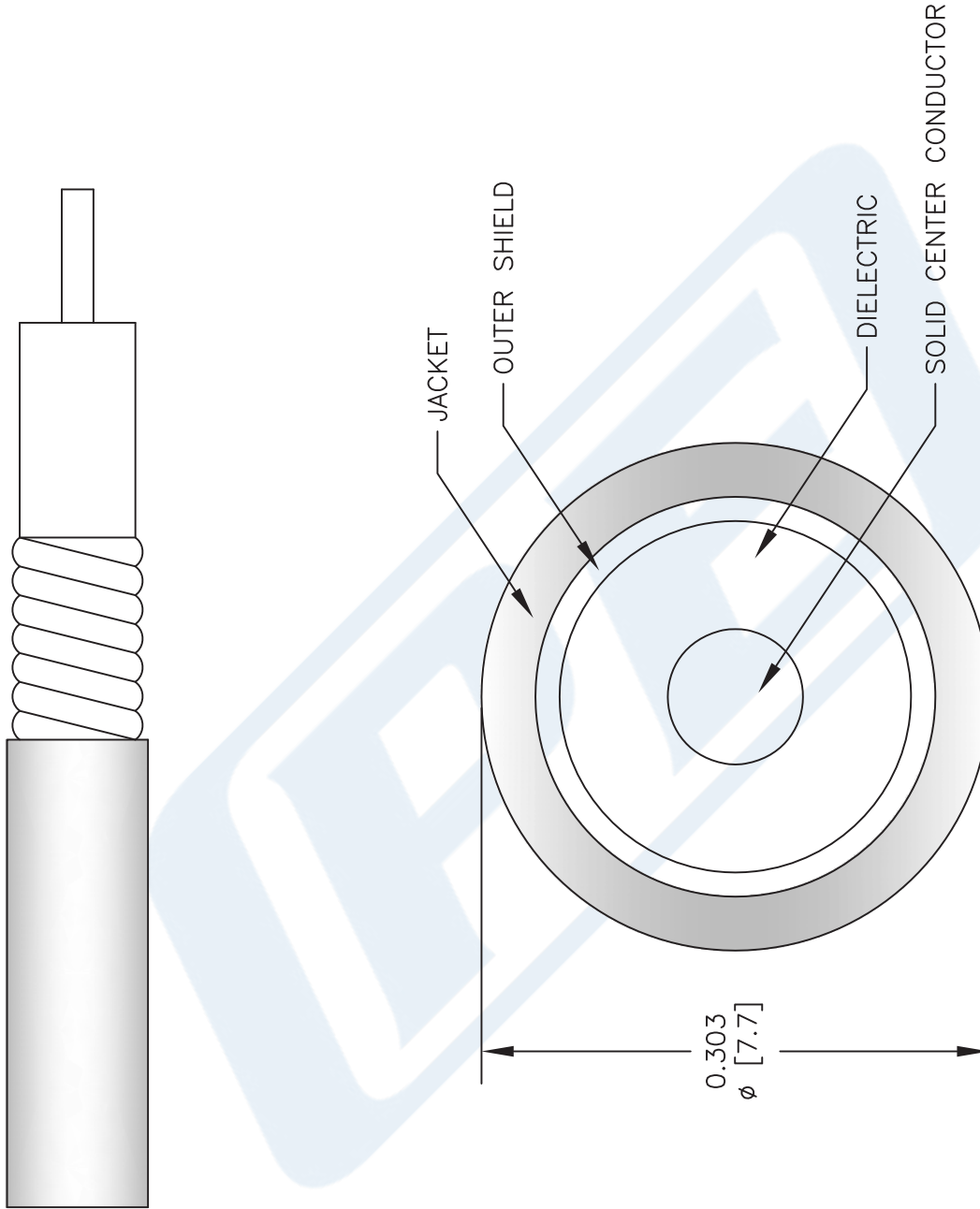
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URL: <https://www.pasternack.com/50-ohm-low-loss-corrugated-1-4-superflexible-helical-coax-pe-1-4sfhc-p.aspx>

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DWG TITLE  
**PE-1/4SFHC**

FSCM NO. 53919

CAD FILE 092112

SCALE N/A

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