



## N Male Right Angle Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

### RF Connectors Technical Data Sheet

PE45665

#### Configuration

- N Male Connector
- 50 Ohms
- Right Angle Body Geometry

- Connector Interface Types: PE-1/4SFHC, SPP-250-LL-PL, SPO-250, SPF-250
- Low PIM Design

#### Features

- Max. Operating Frequency 6 GHz
- PIM levels lower than -160 dBc

- Silver Plated Brass Contact

#### Applications

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

#### Description

Pasternack's PE45665 type N male right angle connector with solder/solder attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250 and SPF-250 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 6 GHz. The type N male connector also has low passive intermodulation of -160 dBc. Its right angle body geometry allows for easier connections in tight spaces.

Our type N male right angle connector PE45665 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      |         | 6       | GHz   |
| Passive Intermodulation              |         |         | -160    | dBc   |
| Dielectric Withstanding Voltage (AC) |         |         | 750     | Vrms  |

#### Performance by Frequency

| Description     | F1      | F2     | F3 | F4 | F5 | Units |
|-----------------|---------|--------|----|----|----|-------|
| Frequency Range | DC to 3 | 3 to 6 |    |    |    | GHz   |
| VSWR, Max       | 1.25:1  | 1.35:1 |    |    |    |       |

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 Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45665](#)



N Male Right Angle Low PIM Connector Solder Attachment  
for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

RF Connectors  
Technical Data Sheet

PE45665

**Mechanical Specifications**

**Size**

|            |                    |
|------------|--------------------|
| Length     | 1.23 in [31.24 mm] |
| Width/Dia. | 0.85 in [21.59 mm] |
| Weight     | 0.11 lbs [49.9 g]  |

**Material Specifications**

| Description  | Material | Plating   |
|--------------|----------|-----------|
| Contact      | Brass    | Silver    |
| Insulation   | PTFE     |           |
| Body         | Brass    | Tri-Metal |
| Coupling Nut | Brass    | Tri-Metal |

Mechanical Specification Notes:  
Interface Conforms to IEC 61169-16

**Environmental Specifications**

**Temperature**

|                 |                   |
|-----------------|-------------------|
| Operating Range | -40 to +155 deg C |
|-----------------|-------------------|

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

**Plotted and Other Data**

Notes:

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 Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45665](#)



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### RF Connectors Technical Data Sheet

PE45665

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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 Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45665](https://www.pasternack.com/n-male-pe-1-4sfhc-spp-250-llpl-connector-pe45665-p.aspx)

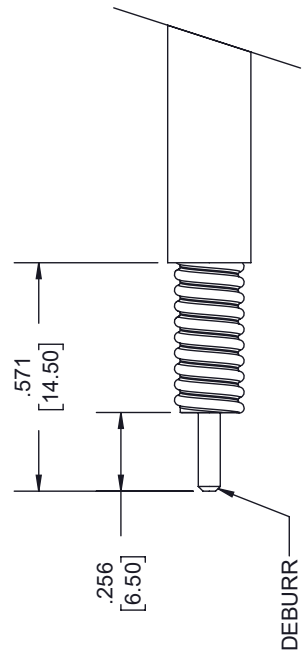
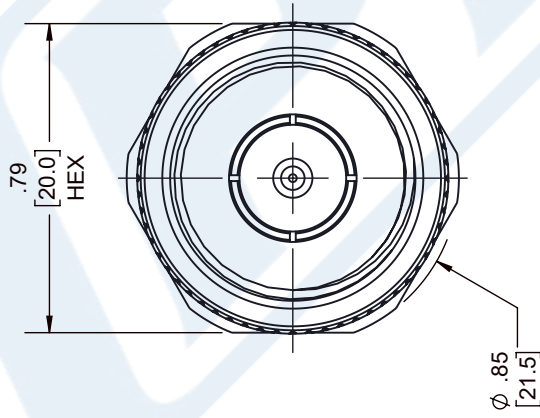
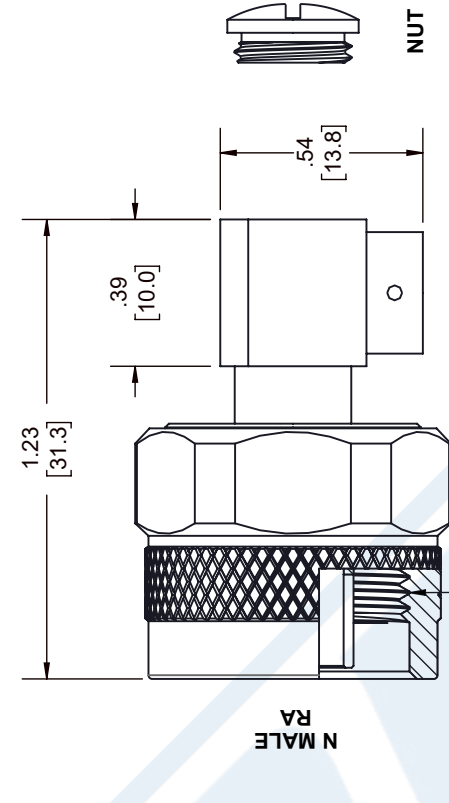
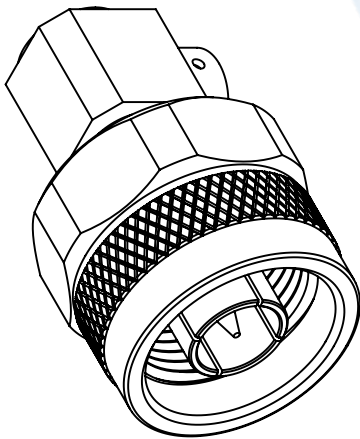
URL: <https://www.pasternack.com/n-male-pe-1-4sfhc-spp-250-llpl-connector-pe45665-p.aspx>

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# PE45665 CAD Drawing

N Male Right Angle Low PIM Connector Solder Attachment for  
PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

| REVISIONS |                 |           |          |
|-----------|-----------------|-----------|----------|
| REV.      | DESCRIPTION     | DATE      | APPROVED |
| A         | INITIAL RELEASE | 1/11/2021 | S. ELLIS |



- NOTES:
- CABLE ATTACHMENT:
    - OUTER: SOLDER.
    - INNER: SOLDER.

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

Pasternack Enterprises, Inc.  
P. O. Box 16759, Irvine, CA 92623.  
Phone: 1.949.261.1920 | 1.866.727.8376  
Fax: 1.949.261.7451  
Website: www.pasternack.com  
E-mail: sales@pasternack.com

SIZE A CAGE CODE 53919 DRAWN BY K.DANG ITEM NO. PE45665

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A



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

## RF Connectors Technical Data Sheet

PE45680

### Configuration

- SMA Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250
- Low PIM Design

### Features

- Max. Operating Frequency 6 GHz
- PIM levels lower than -155 dBc
- Silver Plated Beryllium Copper Contact

### Applications

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

### Description

Pasternack's PE45680 SMA female connector with solder/solder attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250 and SPF-250 is part of our full line of RF components available for same-day shipping. Our SMA female connector operates up to a maximum frequency of 6 GHz. The SMA female connector also has low passive intermodulation of -155 dBc.

Our SMA female connector PE45680 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      |         | 6       | GHz   |
| Passive Intermodulation              |         |         | -155    | dBc   |
| Dielectric Withstanding Voltage (AC) |         |         | 750     | Vrms  |

### Performance by Frequency

| Description     | F1      | F2     | F3 | F4 | F5 | Units |
|-----------------|---------|--------|----|----|----|-------|
| Frequency Range | DC to 3 | 3 to 6 |    |    |    | GHz   |
| VSWR, Max       | 1.15:1  | 1.25:1 |    |    |    |       |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45680](#)



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

RF Connectors  
Technical Data Sheet

PE45680

**Mechanical Specifications**

**Size**

Length 0.8 in [20.32 mm]  
Width/Dia. 0.35 in [8.89 mm]

**Material Specifications**

| Description     | Material         | Plating   |
|-----------------|------------------|-----------|
| Contact         | Beryllium Copper | Silver    |
| Insulation      | PTFE             |           |
| Outer Conductor | Brass            | Tri-Metal |
| Body            | Brass            | Tri-Metal |

**Environmental Specifications**

**Temperature**

Operating Range -40 to +155 deg C

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

**Plotted and Other Data**

Notes:

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

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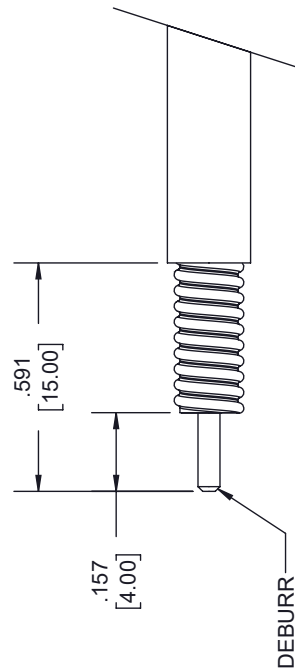
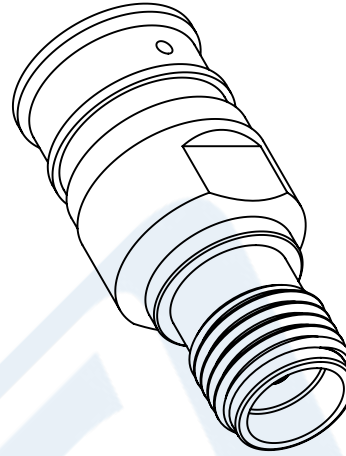
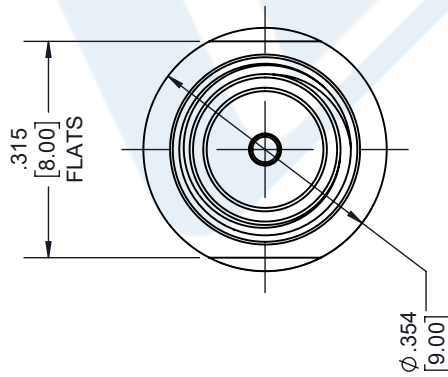
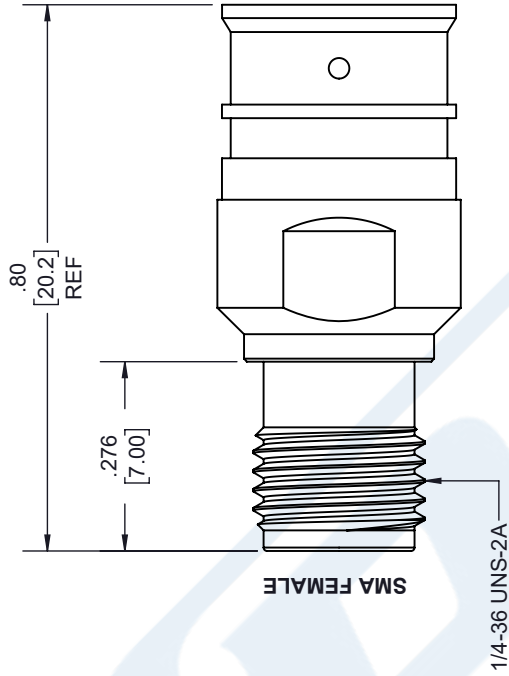
URL: <https://www.pasternack.com/sma-female-pe-1-4sfhc-spp-250-llpl-connector-pe45680-p.aspx>

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# PE45680 CAD Drawing

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

| REVISIONS |                 |           |          |
|-----------|-----------------|-----------|----------|
| REV.      | DESCRIPTION     | DATE      | APPROVED |
| A         | INITIAL RELEASE | 1/13/2021 | S. ELLIS |



### STRIPPING DIMENSIONS

#### NOTES:

- CABLE ATTACHMENT:
  - OUTER: SOLDER.
  - INNER: SOLDER.

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|  |                 |
|--|-----------------|
| UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS |                 |
| TOLERANCES:  | FRACTIONS       |
| .X = ± .2 [5.08]   | ± 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% L / -0    |
| ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.   |                 |

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P. O. Box 16759, Irvine, CA 92623.  
Phone: 1.949.261.1920 | 1.866.727.8376  
Fax: 1.949.261.7451  
Website: www.pasternack.com  
E-mail: sales@pasternack.com

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SHEET 1 OF 1  
SCALE N/A

SIZE A CAGE CODE 53919 DRAWN BY K.DANG ITEM NO. PE45680 REV A



## 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

Notes:

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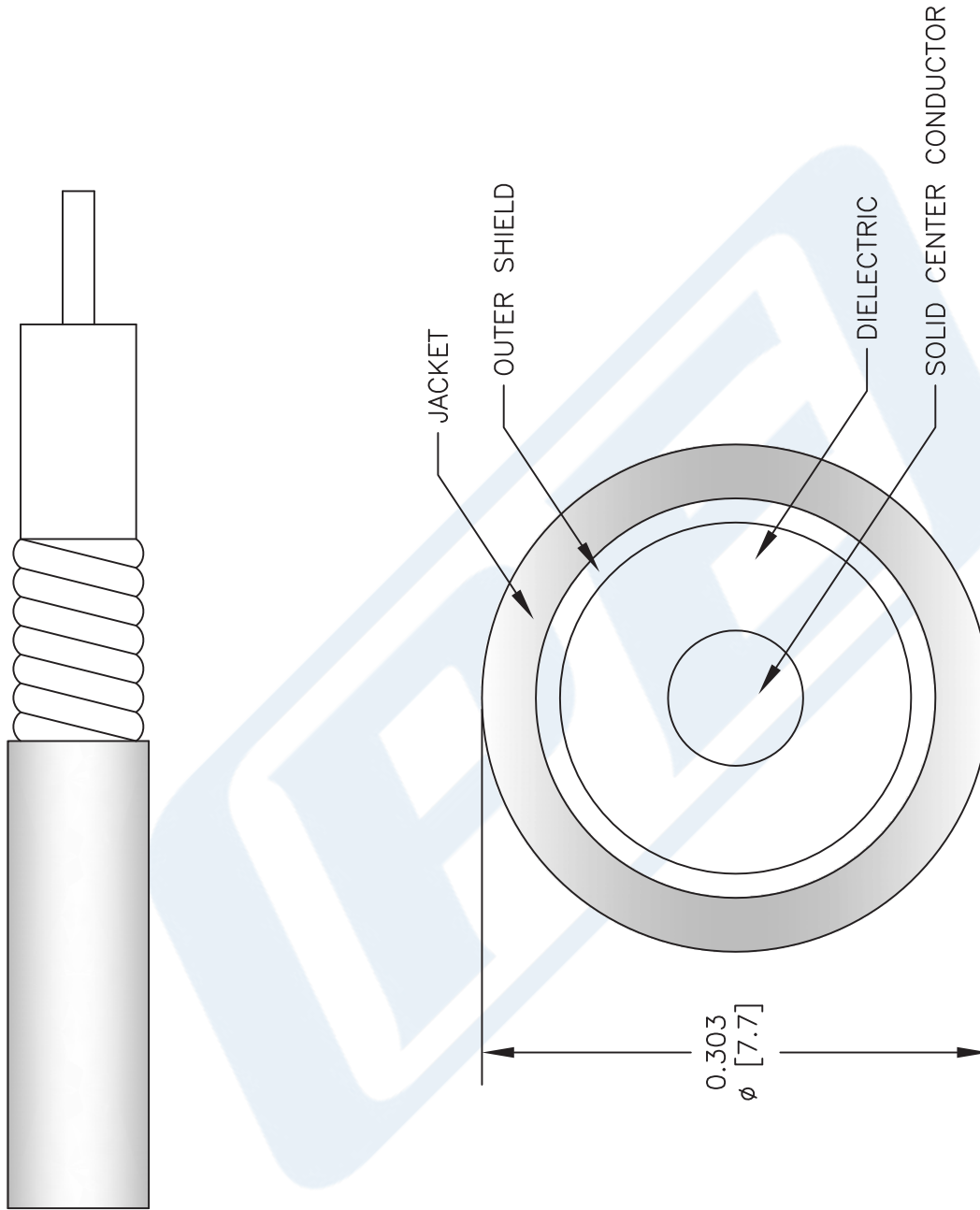
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss 1/4 Superflexible Helical Corrugated Coax Cable with Black PE Jacket PE-1/4SFHC](#)

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

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



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].

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

FSCM NO. 53919

2233

SIZE A

SCALE N/A

CAD FILE 092112



Pasternack Enterprises, Inc.  
 P.O. Box 16759 | Irvine | CA | 92623  
 Phone: (949) 261-1920 | Fax: (949) 261-7451  
 Website: www.pasternack.com | E-Mail: sales@pasternack.com