



## NEX10 Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

### RF Connectors Technical Data Sheet

PE45668

#### Configuration

- NEX10 Male Connector
- 50 Ohms
- Straight 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
- Custom Cable Assemblies
- Wireless Communications
- Low PIM Applications

#### Description

Pasternack's PE45668 NEX10 male 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 NEX10 male connector operates up to a maximum frequency of 6 GHz. The NEX10 male connector also has low passive intermodulation of -160 dBc.

Our NEX10 male connector PE45668 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       | 1.15:1  | 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: [NEX10 Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45668](#)



NEX10 Male Low PIM Connector Solder Attachment for  
PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

RF Connectors  
Technical Data Sheet

PE45668

**Mechanical Specifications**

**Size**

|            |                    |
|------------|--------------------|
| Length     | 0.87 in [22.1 mm]  |
| Width/Dia. | 0.47 in [11.94 mm] |
| Weight     | 0.02 lbs [9.07 g]  |

**Material Specifications**

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

**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: [NEX10 Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45668](#)



## NEX10 Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

### RF Connectors Technical Data Sheet

PE45668

NEX10 Male 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [NEX10 Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45668](https://www.pasternack.com/nex10-male-pe-1-4sfhc-spp-250-llpl-connector-pe45668-p.aspx)

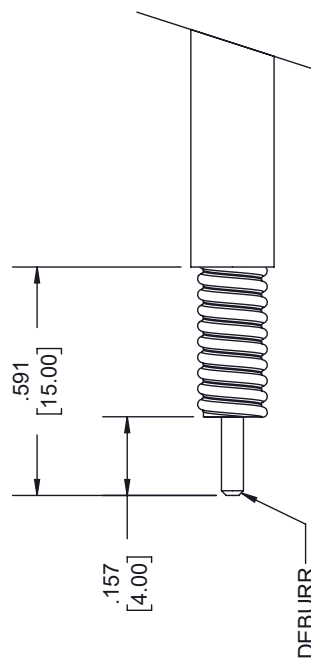
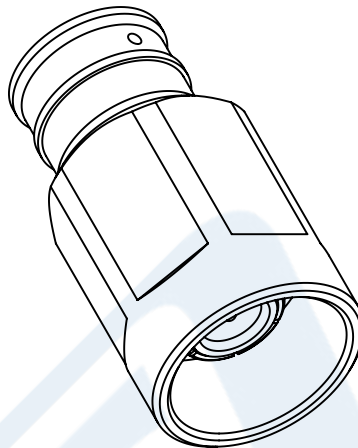
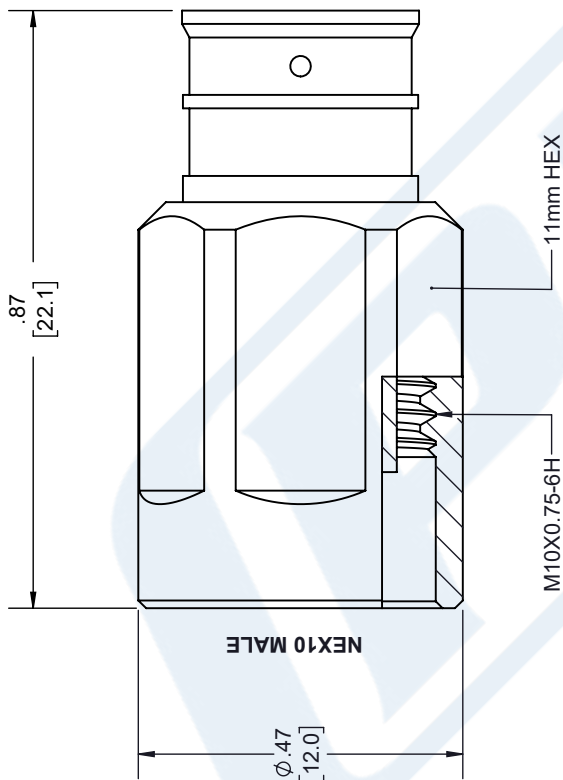
URL: <https://www.pasternack.com/nex10-male-pe-1-4sfhc-spp-250-llpl-connector-pe45668-p.aspx>

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# PE45668 CAD Drawing

NEX10 Male 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 |



## STRIPPING DIMENSIONS

### NOTES:

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

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

| TOLERANCES:                  |                |
|------------------------------|----------------|
| .X = ±.2                     | [5.08]         |
| .XX = ±.02                   | [.51]          |
| .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.



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SHEET 1 OF 1

SCALE N/A

REV A



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ITEM NO. PE45668

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## 7/16 DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

### RF Connectors Technical Data Sheet

PE45660

#### Configuration

- 7/16 DIN Male 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 -160 dBc

- Silver Plated Brass Contact

#### Applications

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

#### Description

Pasternack's PE45660 7/16 DIN male 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 7/16 DIN male connector operates up to a maximum frequency of 6 GHz. The 7/16 DIN male connector also has low passive intermodulation of -160 dBc.

Our 7/16 DIN male connector PE45660 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) |         |         | 1,000   | 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: [7/16 DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45660](#)



7/16 DIN Male Low PIM Connector Solder Attachment for  
PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

## RF Connectors Technical Data Sheet

PE45660

### Mechanical Specifications

#### Size

|            |                    |
|------------|--------------------|
| Length     | 1.1 in [27.94 mm]  |
| Width/Dia. | 1.38 in [35.05 mm] |
| Weight     | 0.17 lbs [77.11 g] |

### Material Specifications

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

Mechanical Specification Notes:  
Interface Conforms to IEC 61169-4

### 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: [7/16 DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45660](#)



## 7/16 DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

### RF Connectors Technical Data Sheet

PE45660

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URL: <https://www.pasternack.com/7-16-din-male-pe-1-4sfhc-spp-250-llpl-connector-pe45660-p.aspx>

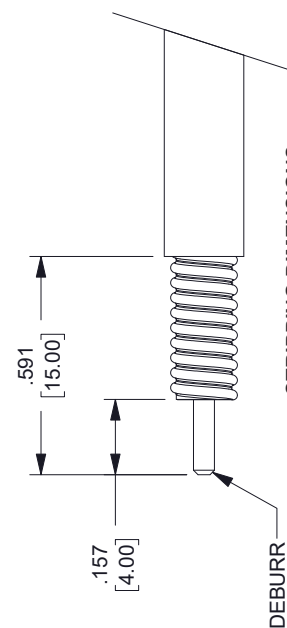
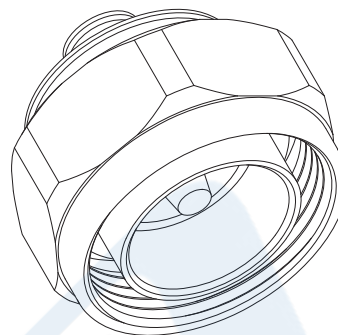
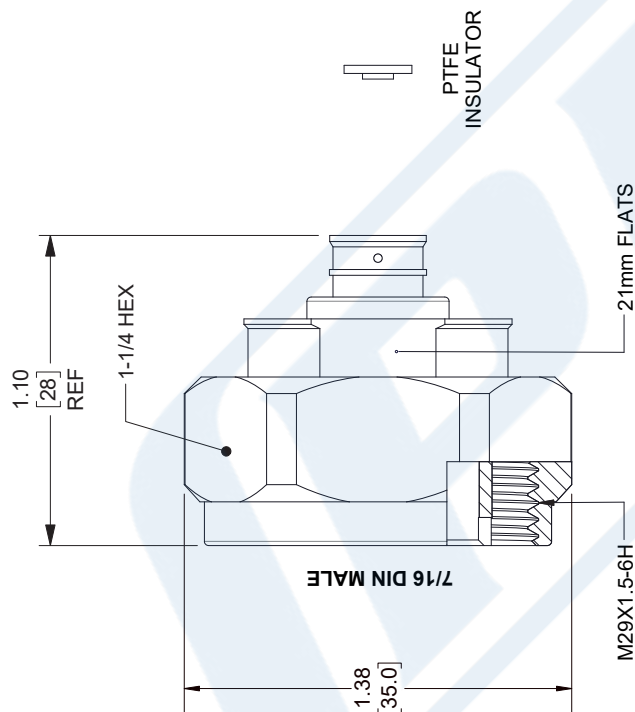
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# PE45660 CAD Drawing

7/16 DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

| REVISIONS |              |            |          |
|-----------|--------------|------------|----------|
| REV.      | DESCRIPTION  | DATE       | APPROVED |
| B         | PCR REVISION | 11/19/2021 | S.ELLIS  |



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

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

TOLERANCES:

| FRACTIONS   | DECIMALS |
|-------------|----------|
| X = +2      | [5.08]   |
| XX = +.02   | [.51]    |
| XXX = ±.005 | [.13]    |

ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

| L                           | TOLERANCE      |
|-----------------------------|----------------|
| L ≤ 12 [305]                | ±.125 [-0]     |
| 12 [305] < L ≤ 60 [1524]    | ±.25 [-0]      |
| 60 [1524] < L ≤ 120 [3048]  | ±.4 [102] [-0] |
| 120 [3048] < L ≤ 300 [7620] | ±.6 [152] [-0] |
| 300 [7620] < L              | ±.5% L [-0]    |

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SHEET 1 OF 1

SCALE N/A

| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | REV |
|------|-----------|----------|----------|-----|
| A    | 53919     | KDANG    | PE45660  | B   |



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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

Notes:

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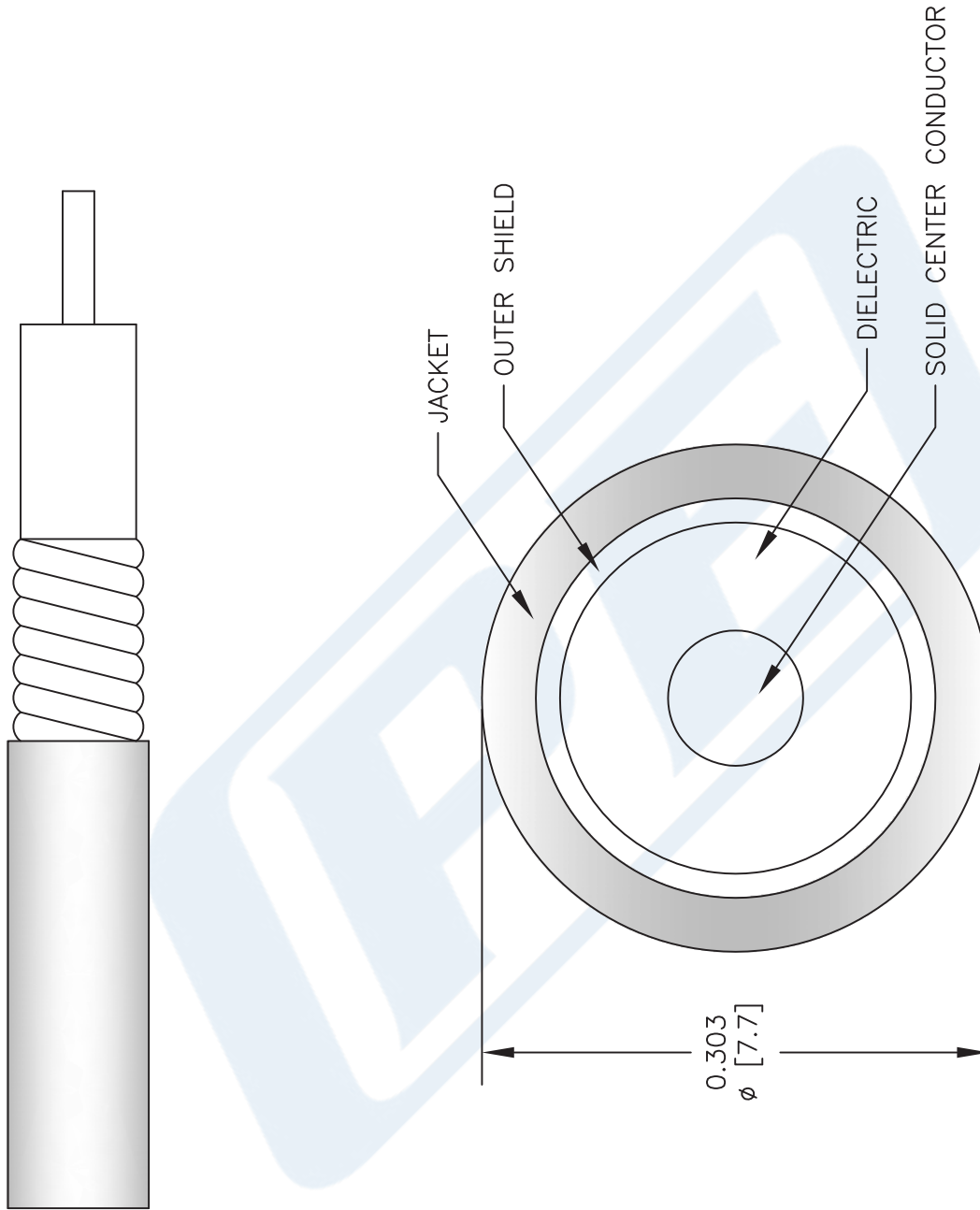
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URL: <https://www.pasternack.com/50-ohm-low-loss-corrugated-1-4-superflexible-helical-coax-pe-1-4sfhc-p.aspx>

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# PE-1/4SFHC CAD Drawing

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**

**(PE) PASTERNAK®**

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