



## 2.2-5 Male Low PIM Quick Lock Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

### RF Connectors Technical Data Sheet

PE45677

#### Configuration

- Quick Lock 2.2-5 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
- Excellent VSWR of 1.25:1

- PIM levels lower than -163 dBc
- Silver Plated Brass Contact

#### Applications

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

#### Description

Pasternack's PE45677 2.2-5 male quick lock 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 2.2-5 male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.25:1. The 2.2-5 male connector also has low passive intermodulation of -163 dBc.

Our 2.2-5 male connector PE45677 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   |
| VSWR                                 |         |         | 1.25:1  |       |
| Passive Intermodulation              |         |         | -163    | 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: [2.2-5 Male Low PIM Quick Lock Connector Solder Attachment for PE-1/4SFHC, SPP-250-LL-PL, SPO-250, SPF-250 PE45677](#)



## 2.2-5 Male Low PIM Quick Lock Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

### RF Connectors Technical Data Sheet

PE45677

#### Mechanical Specifications

##### Size

|            |                    |
|------------|--------------------|
| Length     | 0.88 in [22.35 mm] |
| Width/Dia. | 0.71 in [18.03 mm] |
| Weight     | 0.03 lbs [13.61 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: [2.2-5 Male Low PIM Quick Lock Connector Solder Attachment for PE-1/4SFHC, SPP-250-LL-PL, SPO-250, SPF-250 PE45677](#)



## 2.2-5 Male Low PIM Quick Lock Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

### RF Connectors Technical Data Sheet

PE45677

2.2-5 Male Low PIM Quick Lock 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: [2.2-5 Male Low PIM Quick Lock Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45677](https://www.pasternack.com/2.2-5-male-quick-lock-pe-1-4sfhc-spp-250-llpl-connector-pe45677-p.aspx)

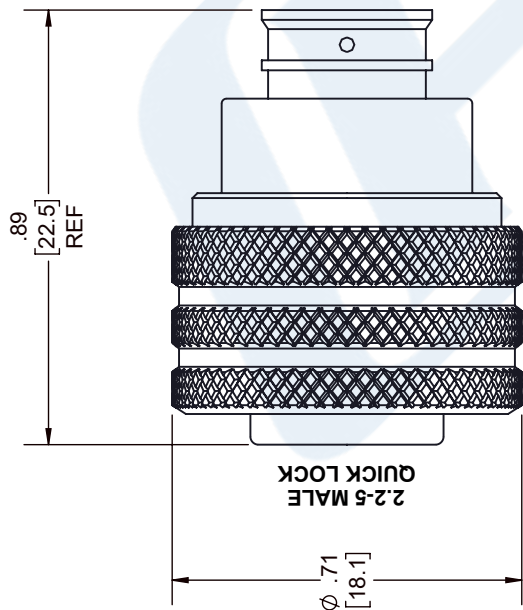
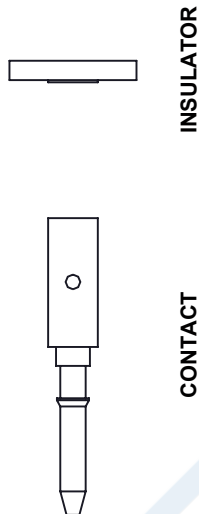
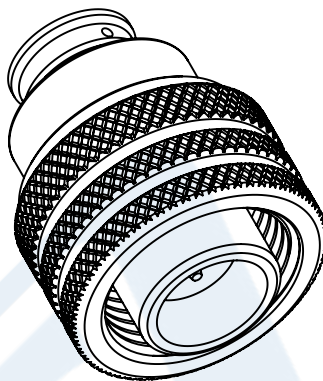
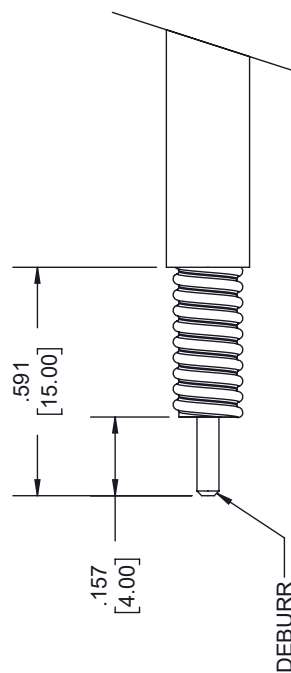
URL: <https://www.pasternack.com/2.2-5-male-quick-lock-pe-1-4sfhc-spp-250-llpl-connector-pe45677-p.aspx>

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# PE45677 CAD Drawing

2.2-5 Male Low PIM Quick Lock Connector Solder Attachment  
for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

| REVISIONS |                 |           |          |
|-----------|-----------------|-----------|----------|
| REV.      | DESCRIPTION     | DATE      | APPROVED |
| A         | INITIAL RELEASE | 1/12/2021 | S. ELLIS |



## STRIPPING DIMENSIONS

### NOTES:

1. CABLE ATTACHMENT:  
• OUTER: SOLDER.  
• INNER: SOLDER.

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

| TOLERANCES:                  |                     |
|------------------------------|---------------------|
| X = ± .2                     | FRACTIONS           |
| .XX = ± .02                  | [ .51 ] ± 1/32      |
| .XXX = ± .005                | [ .13 ] ANGLES ± 1° |
| 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  
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SHEET 1 OF 1

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SIZE A CAGE CODE 53919 DRAWN BY K.DANG ITEM NO. PE45677



## 4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL, SPF-250, SPO-250, 1/4" Superflexible, PE-1/4SFHC

### RF Connectors Technical Data Sheet



**TC-250-4310MS-LP**

#### Times Microwave Systems Connector Specification

##### Configuration

- Snap-On 4.3-10 Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: SPP-250-LLPL, SPF-250, SPO-250, 1/4" Superflexible, PE-1/4SFHC
- Low PIM Design

##### Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.25:1
- PIM levels lower than -160 dBc
- Silver Plated Brass Contact
- 5 µm contact plating

##### Applications

- General Purpose Test
- Custom Cable Assemblies
- Distributed Antenna Systems (DAS)
- Wireless Communications
- Low PIM Applications

##### Description

Times Microwave's TC-250-4310MS-LP 4.3-10 male snap-on connector offered by Pasternack with solder/solder attachment for Times' SPP-250-LLPL, SPF-250, SPO-250, 1/4" Superflexible and PE-1/4SFHC is part of our full line of RF components available for same-day shipping. Times Microwave's 4.3-10 male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.25:1. The Times 4.3-10 male connector also has low passive intermodulation of -160 dBc.

Times Microwave's 4.3-10 male connector TC-250-4310MS-LP 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   |
| VSWR                                 |         |         | 1.25:1  |       |
| Insertion Loss                       |         |         | 0.25    | dB    |
| Passive Intermodulation              |         |         | -160    | dBc   |
| Operating Voltage (DC)               |         |         | 1,000   | Vdc   |
| Dielectric Withstanding Voltage (AC) |         |         | 1,000   | Vrms  |
| 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: [4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL, SPF-250, SPO-250, 1/4" Superflexible, PE-1/4SFHC TC-250-4310MS-LP](#)



4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL, SPF-250, SPO-250, 1/4" Superflexible, PE-1/4SFHC

**RF Connectors**  
**Technical Data Sheet**



**TC-250-4310MS-LP**

**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 |    |    |    |       |

Electrical Specification Notes:  
Insertion Loss is 0.1\*sqrt(FGHz)

**Mechanical Specifications**

**Size**

|                       |                        |
|-----------------------|------------------------|
| Length                | 1.13 in [28.7 mm]      |
| Width/Dia.            | 0.84 in [21.34 mm]     |
| Height                | 0.84 in [21.34 mm]     |
| Weight                | 0.0835 lbs [37.87 g]   |
| Mating Cycles         | 500 Cycles             |
| Mating Torque         | 44.25 in-lbs [5.00 Nm] |
| Cable Retention Force | 113 lbs 51.26 kg       |

**Material Specifications**

| Description  | Material | Plating           |
|--------------|----------|-------------------|
| Contact      | Brass    | Silver<br>5 µm    |
| Insulation   | PTFE     |                   |
| Body         | Brass    | Tri-Metal<br>2 µm |
| Coupling Nut | Brass    | Tri-Metal<br>2 µm |
| Gasket       | Silicone |                   |

**Environmental Specifications**

**Temperature**

|                 |                                       |
|-----------------|---------------------------------------|
| Operating Range | -55 to +85 deg C                      |
| Shock           | MIL-STD 202G, Method 213, Condition I |
| Vibration       | MIL-STD 202G, Method 204, Condition B |
| Thermal Shock   | MIL-STD 202G, Method 107, Condition B |

Environmental Specification Notes:  
IEC 60068 55/155/56

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL, SPF-250, SPO-250, 1/4" Superflexible, PE-1/4SFHC TC-250-4310MS-LP](#)



### 4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL, SPF-250, SPO-250, 1/4" Superflexible, PE-1/4SFHC

## RF Connectors Technical Data Sheet



**TC-250-4310MS-LP**

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

#### Plotted and Other Data

Notes:

4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL, SPF-250, SPO-250, 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.

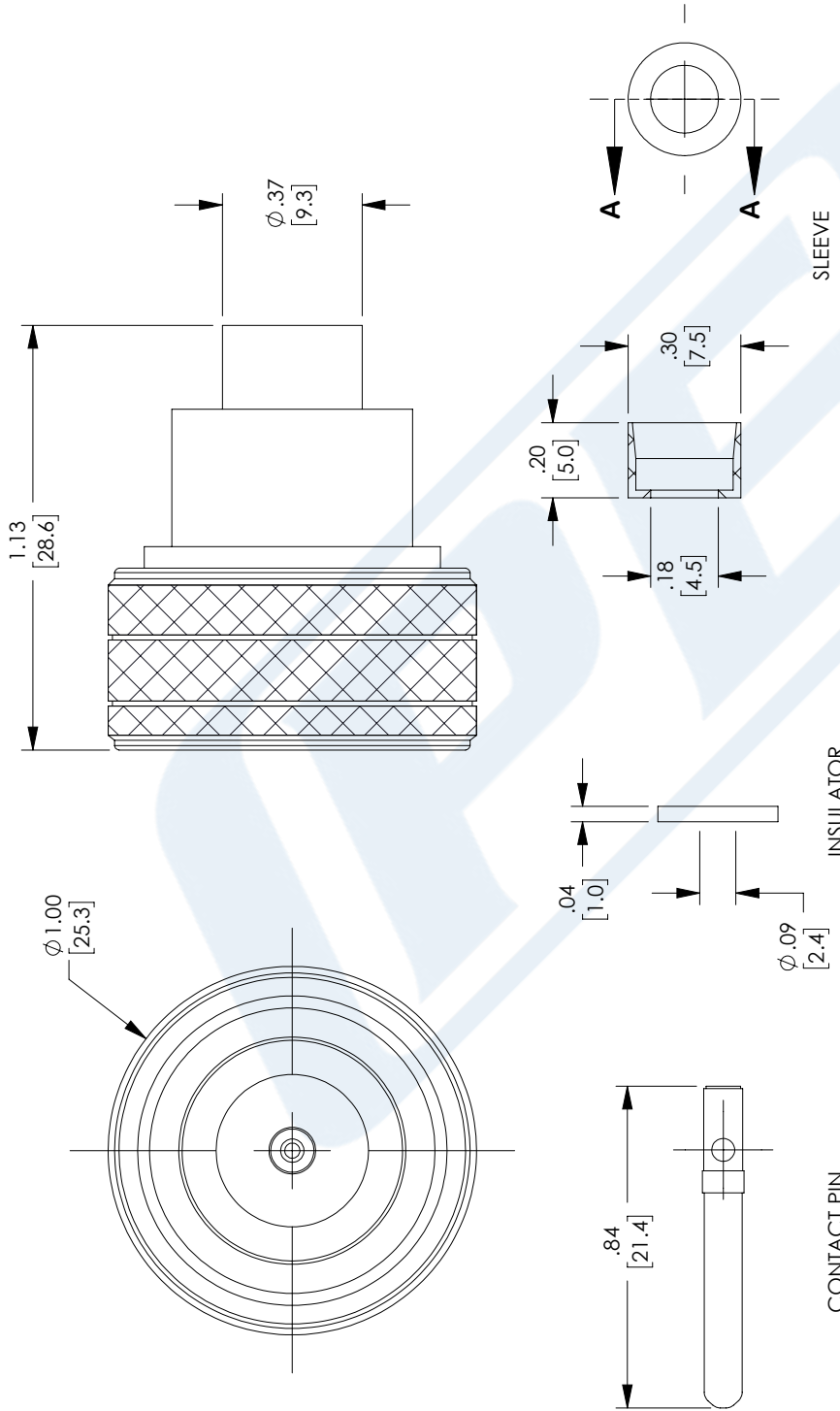
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL, SPF-250, SPO-250, 1/4" Superflexible, PE-1/4SFHC TC-250-4310MS-LP](#)

URL: <https://www.pasternack.com/4.3-10-male-snap-on-spp-250-llpl-connector-tc-250-4310ms-lp-p.aspx>

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**TIMES** MICROWAVE SYSTEMS **TC-250-4310MS-LP CAD Drawing**  
 4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-  
 250-LLPL, SPF-250, SPO-250, 1/4" Superflexible, PE-1/4SFHC

| REVISIONS |                 |            |          |
|-----------|-----------------|------------|----------|
| REV.      | DESCRIPTION     | DATE       | APPROVED |
| A         | INITIAL RELEASE | 03/10/2021 | SELLIS   |



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

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

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

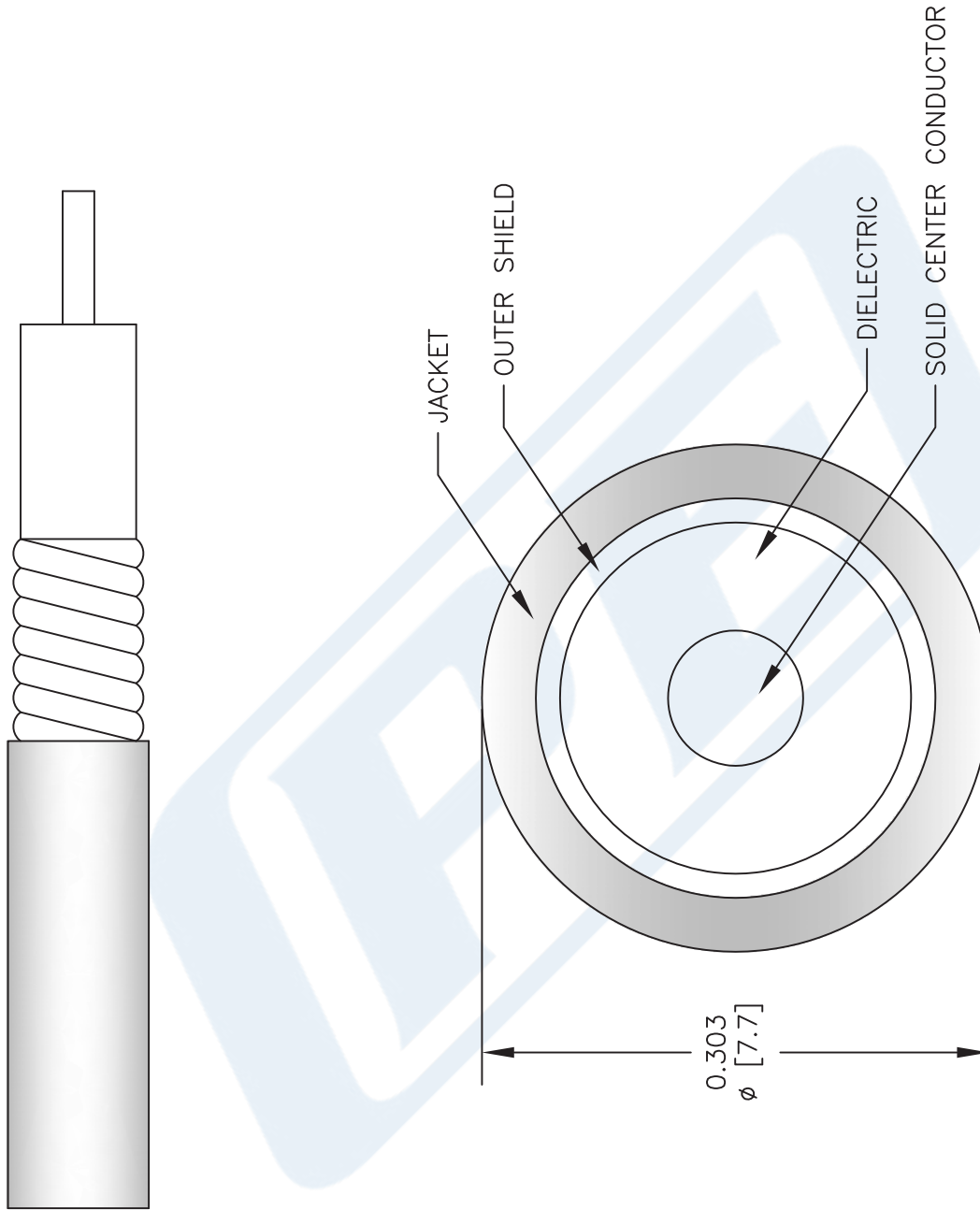
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss 1/4 Superflexible Helical Corrugated Coax Cable with Black PE Jacket PE-1/4SFHC](#)

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

**PE PASTERNAK®**

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