



4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

RF Connectors Technical Data Sheet

PE45650

Configuration

- 4.1/9.5 Mini DIN 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 PE45650 4.1/9.5 Mini 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 4.1/9.5 Mini DIN male connector operates up to a maximum frequency of 6 GHz. The 4.1/9.5 Mini DIN male connector also has low passive intermodulation of -160 dBc.

Our 4.1/9.5 Mini DIN male connector PE45650 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 | | | | | GHz |
| VSWR, Max | 1.15:1 | | | | | |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LL-PL, SPO-250, SPF-250 PE45650](#)



4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

RF Connectors Technical Data Sheet

PE45650

Mechanical Specifications

Size

| | |
|------------|--------------------|
| Length | 0.86 in [21.84 mm] |
| Width/Dia. | 0.94 in [23.88 mm] |
| Weight | 0.08 lbs [36.29 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 IEC61169-11

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: [4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LL-PL, SPO-250, SPF-250 PE45650](#)



4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

RF Connectors Technical Data Sheet

PE45650

4.1/9.5 Mini DIN 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: [4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45650](https://www.pasternack.com/4.1-9.5-mini-din-male-pe-1-4sfhc-spp-250-llpl-connector-pe45650-p.aspx)

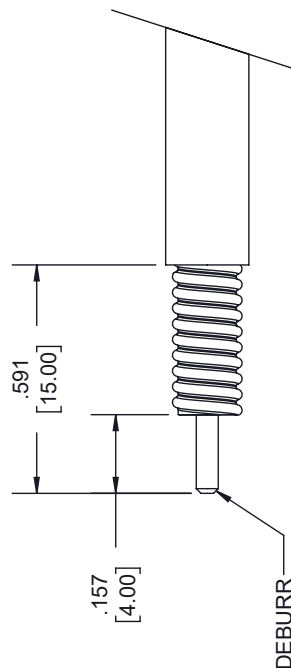
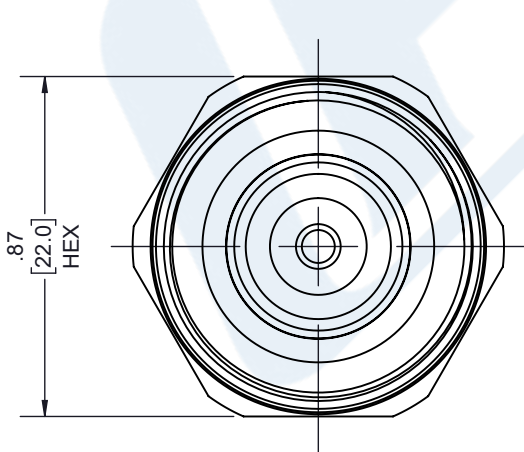
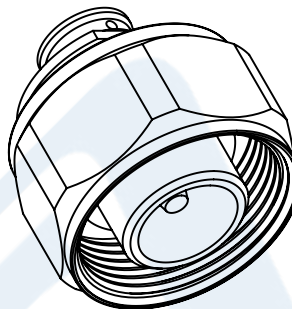
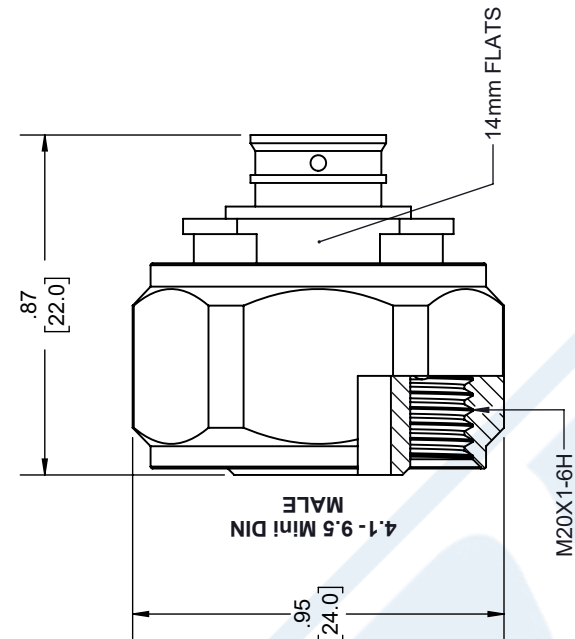
URL: <https://www.pasternack.com/4.1-9.5-mini-din-male-pe-1-4sfhc-spp-250-llpl-connector-pe45650-p.aspx>

The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PE45650 CAD Drawing

4.1/9.5 Mini DIN 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 | 1/8/2021 | S. ELLIS |



STRIPPING DIMENSIONS

NOTES:

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

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE IN 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. | |



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SHEET 1 OF 1

SCALE N/A

REV A



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ITEM NO. PE45650

DRAWN BY K.DANG

SIZE A

CAGE CODE 53919

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-LL-PL, 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.

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](#)

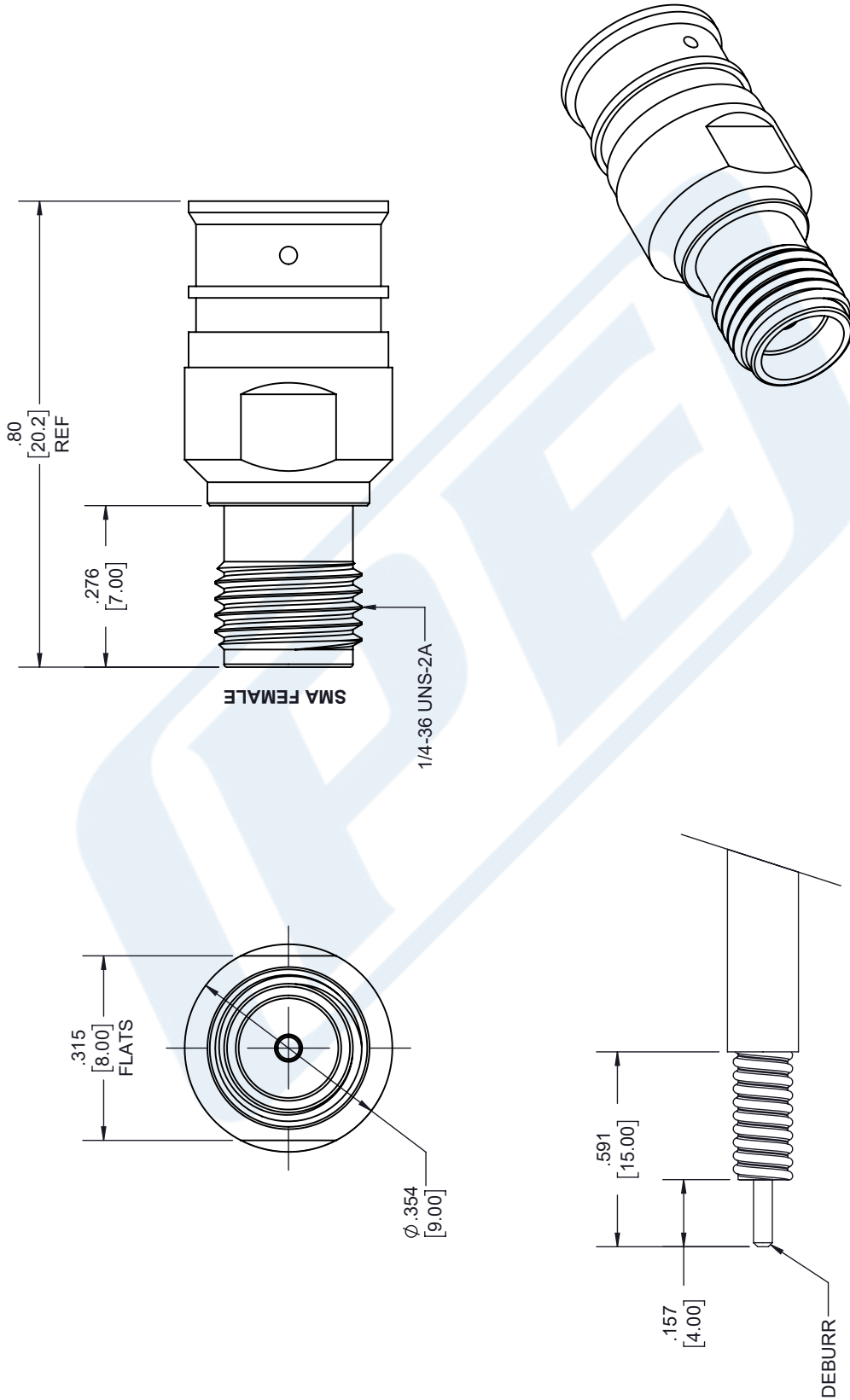
URL: <https://www.pasternack.com/sma-female-pe-1-4sfhc-spp-250-llpl-connector-pe45680-p.aspx>

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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 |



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|--|--|---|--|
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| <p>SCALE N/A</p> | | <p>REV A</p> | |
| <p>PE PASTERNAK an INFINITE brand</p> <p>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</p> | | <p>ITEM NO. PE45680</p> | |
| <p>SIZE A</p> | | <p>DRAWN BY K.DANG</p> | |
| <p>CAGE CODE 53919</p> | | <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> | |

| | |
|---|---|
| <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> | |
| <p>TOLERANCES:</p> <p>X = ± .2 [5.08]</p> <p>.XX = ± .02 [.51]</p> <p>.XXX = ± .005 [.13]</p> | <p>FRACTIONS</p> <p>± 1/32</p> <p>ANGLES ± 1°</p> |
| <p>CABLE LENGTH (L) TOLERANCES:</p> <p>L ≤ 12 [305] = +1 [25] / -0</p> <p>12 [305] < L ≤ 60 [1524] = +2 [51] / -0</p> <p>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</p> <p>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</p> <p>300 [7620] < L = +5% / -0</p> | |

NOTES:

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

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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.

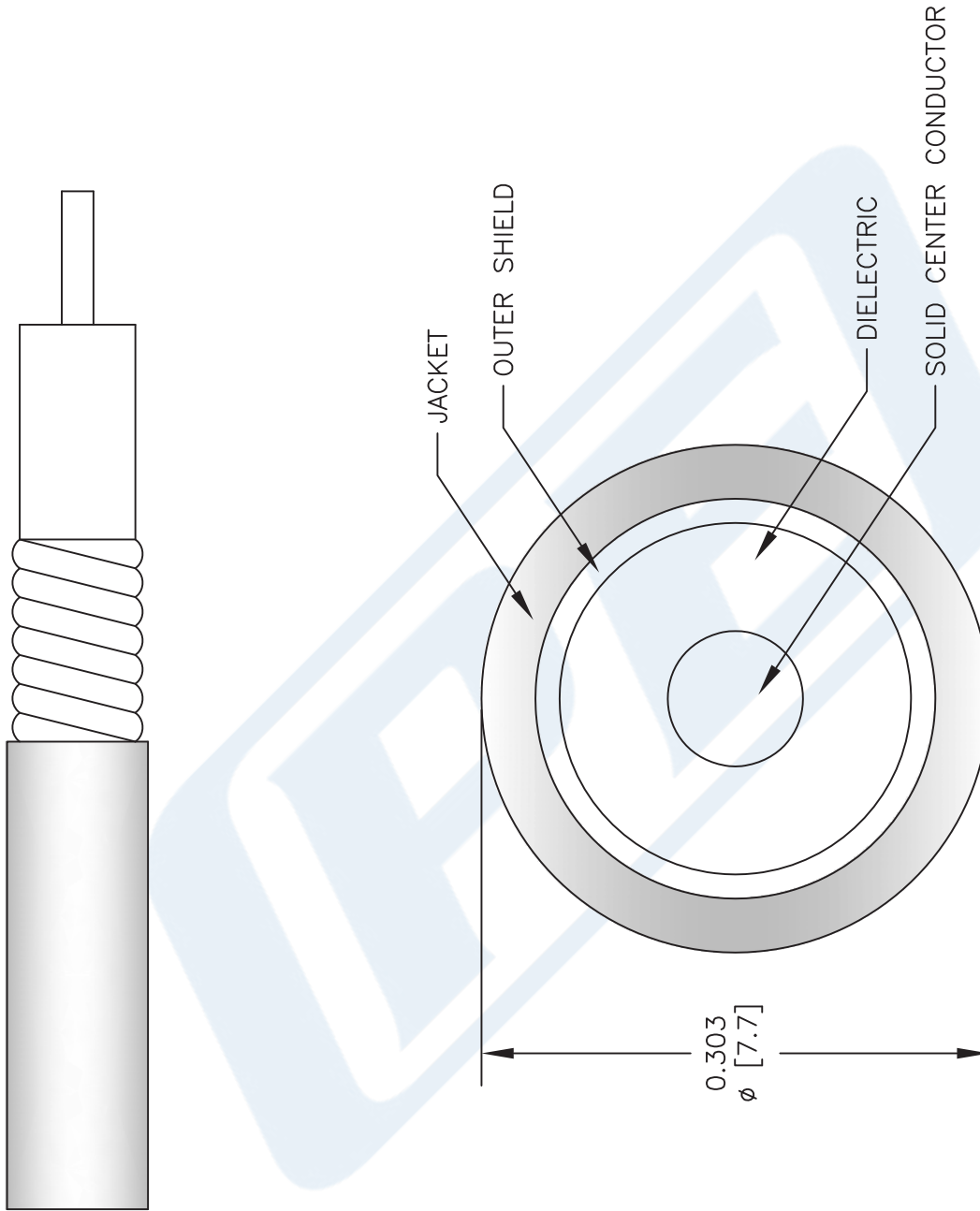
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss 1/4 Superflexible Helical Corrugated Coax Cable with Black PE Jacket PE-1/4SFHC](#)

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

2233

SIZE A

SCALE N/A

CAD FILE 092112

PE PASTERNAK®

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