PASTERNACK®
THE ENGINEER'S RF SOURCE

# 4.3-10 Male Low PIM Push-On Connector Solder Attachment for PE-1/2SFHC, IP67 Rated

RF Connectors Technical Data Sheet PE45300

## Configuration

- Push-On4.3-10 Male Connector
- Straight Body Geometry
- PE-1/2SFHC Interface Type
- Solder/Solder Attachment
- Low PIM Design

## Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.12:1
- PIM levels lower than -166 dBc
- Silver Plated Brass Contact
- IP 67 (Mated)
- Low Coupling Torque
- Corrosion Resistant Tri-Metal Finish
- Low-PIM rating of -166 dBc

## Applications

- General Purpose Test
- Wireless Communications
- Custom Cable Assemblies
- Low PIM Applications
- Mobile Communications Systems
- Base Stations
- Distributed Antenna Systems (DAS)
- Small Cells
- Feeder Cables

### Description

Pasternack's PE45300 4.3-10 male push-on connector with solder/solder attachment for PE-1/2SFHC is part of our full line of RF components available for same-day shipping. Our 4.3-10 male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.12:1. The 4.3-10 male connector also has low passive intermodulation of -166 dBc. The connector has an IP67 rating to protect against dust and temporary moisture protection under immersion conditions.

Our 4.3-10 male connector PE45300 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 | | | 1.12:1 | |
| Insertion Loss | | | 0.13 | dB |
| Passive Intermodulation | | -166 | | dBc |
| Operating Voltage (AC) | | | 1,000 | Vrms |
| Dielectric Withstanding Voltage (AC) | | | 2,500 | 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 Push-On Connector Solder Attachment for PE-1/2SFHC, IP67 Rated PE45300

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
**Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

PASTERNACK®
THE ENGINEER'S RF SOURCE

# 4.3-10 Male Low PIM Push-On Connector Solder Attachment for PE-1/2SFHC, IP67 Rated



## Mechanical Specifications

### Size

| | |
|---|---|
| Length | 1.06 in [26.92 mm] |
| Width/Dia. | 1 in [25.40 mm] |
| Weight | 0.073 lbs [33.11 g] |
| Mating Cycles | 100 Cycles |

### Material Specifications

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

## Environmental Specifications

### Temperature

| | |
|---|---|
| Operating Range | -55 to +90 deg C |
| Ingress Protection (IP) Rating | IP 67 (Mated) |

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 Push-On Connector Solder Attachment for PE-1/2SFHC, IP67 Rated PE45300

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
**Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

# 4.3-10 Male Low PIM Push-On Connector Solder Attachment for PE-1/2SFHC, IP67 Rated



**Compliance Certifications** (see product page for current document)

**Plotted and Other Data**

Notes:

4.3-10 Male Low PIM Push-On Connector Solder Attachment for PE-1/2SFHC, IP67 Rated 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 Push-On Connector Solder Attachment for PE-1/2SFHC, IP67 Rated PE45300

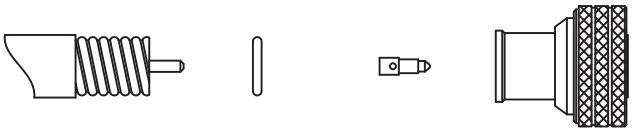
URL: https://www.pasternack.com/4.3-10-male-pe-1-2sfhc-connector-pe45300-p.aspx



Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
**Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

# PE45300 CAD Drawing

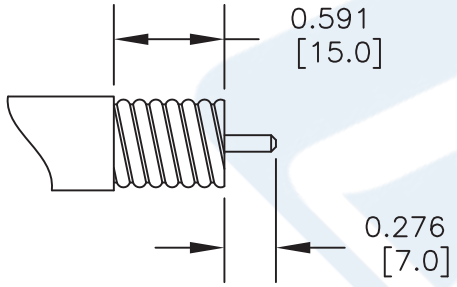
4.3-10 Male Low PIM Push-On Connector Solder Attachment for PE-1/2SFHC, IP67 Rated



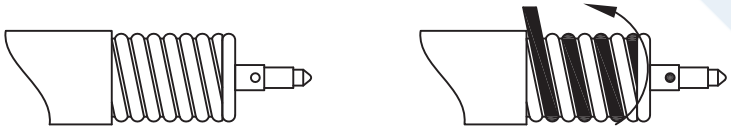
CABLE INSULATOR CONTACT BODY

## ASSEMBLY PROCEDURES

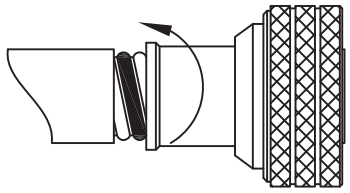
1. STRIP CABLE AS SHOWN, CHAMFER CENTER CONDUCTOR & DEBURR CABLE.

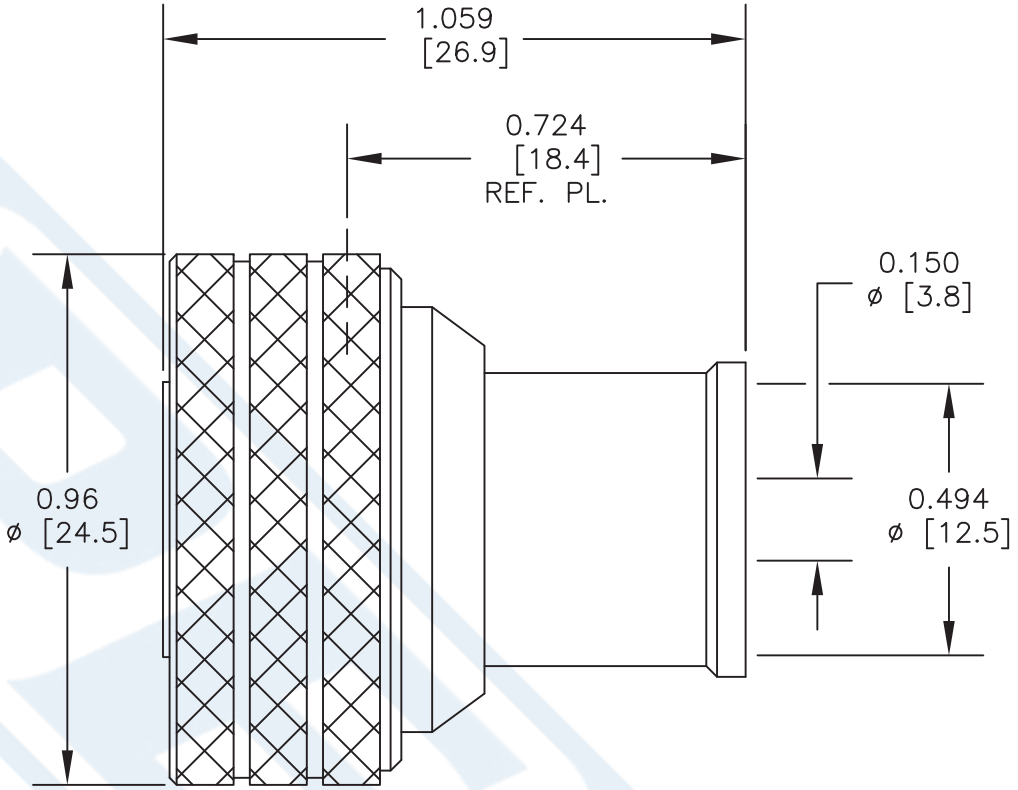



2. INSERT INSULATOR CLIP. INSERT CENTER CONTACT AND SOLDER. WRAP THE CABLE BY SOLDER WIRE (Dia 1.2mm).



3. PUSH THE CONNECTOR BODY INTO THE CABLE, UNTIL IT STOPS. SOLDER THE CONNECTOR BODY WITH CABLE.






| STANDARD TOLERANCES | |
|---|---|
| .X | ±0.2 |
| .XX | ±0.1 |
| .XXX | ±0.05 |

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

PASTERNACK THE ENGINEER'S RF SOURCE
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

DWG TITLE

**PE45300**

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].

| CAGE CODE 53919 | CAD FILE 011917 | SCALE N/A | SIZE A | 2233 |
|---|---|---|---|---|

PASTERNACK®
www.pasternack.com

# 7/16 DIN Male Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2” Superflexible, PE-1/2SFHC

## TECHNICAL DATA SHEET PE44732

### 7/16 DIN Male Connectors

These Pasternack Enterprises’ high performance connectors are designed to fit on most commercially available 1/2” superflexible, spiral corrugated copper cables and aluminum cables. These connectors are perfect for applications requiring low PIM levels, with outstanding RF performance and are easy to install in the field.

Features of the new connectors include:

- Tri-metal coating resulting in a very durable surface with good corrosion protection while providing superior electrical conductivity and exceptional PIM performance
- PIM performance of <= -160 dBc. VSWR levels of <= 1.10 up to 3GHz
- Available in 7/16 DIN and Type N series with both male and female interfaces
- O Rings gaskets provide a reliable long term weather seal
- Designed to fit on most commercially available 1/2” corrugated copper and aluminum cables

### Configuration

| | |
|---|---|
| Connector | 7/16 DIN Male |
| Connector Interface Type | 1/2” Superflexible,PE-1/2SFHC |
| Cable Attachment Method (Shield/Contact) | Clamp/Non-Solder Contact |
| Connector Design | Low PIM |
| Body Style | Straight |

### Electrical Specifications

| | |
|---|---|
| Frequency Range, GHz | DC to 3 |
| Impedance, Ohms | 50 |
| Maximum VSWR | 1.1:1 |
| Maximum Insertion Loss, dB | 0.1 |
| Dielectric Withstanding Voltage, Vrms | 3,000 |
| Maximum Passive Intermodulation (2 x 20 Watts), dBc | -160 |

### Mechanical Specifications

**Temperature**

| | |
|---|---|
| Operating Range, deg C | -40 to +85 |

**Size**

| | |
|---|---|
| Length, in [mm] | 2.04 [51.82] |
| Width/Dia., in [mm] | 1.25 [31.75] |
| Weight, lbs [g] | 0.28 [127.01] |

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 Clamp/Non-Solder Contact Attachment For 1/2” Superflexible, PE-1/2SFHC PE44732



Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
**Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

PASTERNACK®
www.pasternack.com

# 7/16 DIN Male Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2” Superflexible, PE-1/2SFHC

## TECHNICAL DATA SHEET PE44732

**Connector**

| | |
|---|---|
| Type | 7/16 DIN Male |
| Mating Cycles | 500 |
| Contact Material and Plating | Spring Copper, Silver |
| Contact Plating Specification | 200 [5] µ in. [µm] minimum |
| Outer Conductor Material and Plating | Brass, Tri-Metal |
| Outer Conductor Plating Specification | 78 [2] µ in. [µm] minimum |
| Coupling Nut Material and Plating | Brass, Nickel |
| Coupling Nut Plating Specification | 200 [5] µ in. [µm] minimum |
| Hex Size, mm | 32 |
| Torque, ft-lbs [Nm] | 18.417 [24.97] |
| Body Material and Plating | Brass, Tri-Metal |
| Body Plating Specification | 78 [2] µ in. [µm] minimum |
| Dielectric Type | TPX |

**Compliance Certifications** (visit www.Pasternack.com for current document)

| | |
|---|---|
| RoHS Compliant | Yes |

**Plotted and Other Data**

| | |
|---|---|
| Notes: | Values at 25 °C, sea level |

7/16 DIN Male Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2” Superflexible, PE-1/2SFHC from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% 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: 7/16 DIN Male Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2” Superflexible, PE-1/2SFHC PE44732

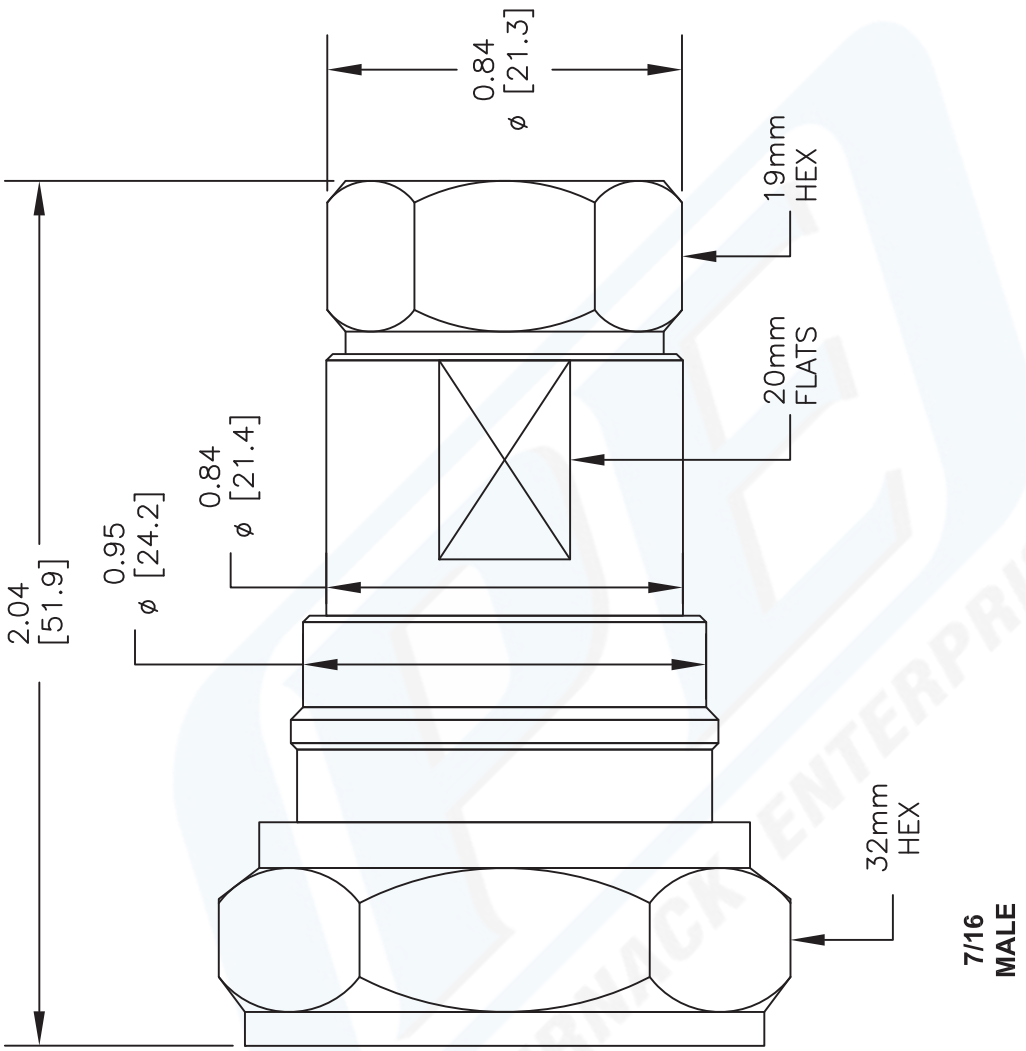
URL: http://www.pasternack.com/7-16-male-standard-1-2-inch-super-fexible-pe-12sfhc-connector-pe44732-p.aspx



Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
**Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

# PE44732 CAD Drawing

7/16 DIN Male Low PIM Connector Clamp/Non-Solder Contact
Attachment For 1/2” Superflexible, PE-1/2SFHC




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 **PE44732**

REV. - | FSCM NO. 53919 | DATE 081412 | SCALE N/A | SIZE A | 2233


PASTERNACK ENTERPRISES, INC.
P.O BOX 16759, IRVINE, CA 92623
PHONE (949) 261-1920 FAX (949) 261-7451
WEB ADDRESS: www.pasternack.com
E-MAIL ADDRESS: sales@pasternack.com
COAXIAL & FIBER OPTICS
PASTERNACK ENTERPRISES®
ESTABLISHED 1972

PASTERNACK®
www.pasternack.com

# Low Loss 1/2 Superflexible Helical Corrugated Coax Cable with Black PE Jacket

## TECHNICAL DATA SHEET PE-1/2SFHC

### 1/2” Superflexible Low Loss Foam Dielectric Copper Corrugated Coaxial Cable features

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.

- 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

### Configuration

| | |
|---|---|
| Cable Design | Low Loss |
| Inner Conductor Material and Plating | Copper Clad Aluminum |
| Dielectric Type | Foam PE |
| Shield Materials | Helically Corrugated Copper Tube |
| Jacket Material, Color | PE, Black |

### Electrical Specifications

| | |
|---|---|
| Impedance, Ohms | 50 |
| Velocity of Propagation, % | 82 |
| Max Operating Frequency, GHz | 10.2 |
| Cutoff Frequency, GHz | 13 |
| RF Shielding, dB | 120 |
| Capacitance, pF/ft [pF/m] | 25.3 [83.01] |
| Inductance, uH/ft [uH/m] | 0.059 [0.19] |
| DC Resistance Inner Conductor, Ohms/1000ft [Ohms/Km] | 0.91 [2.99] |
| DC Resistance Outer Conductor, Ohms/1000ft [Ohms/Km] | 1.08 [3.54] |
| Max Operating Voltage, Volts | 1000 |
| Dielectric Withstanding Voltage, Vrms | 2500 |

**Electrical Specifications by Frequency**

**Frequency 1**

| | |
|---|---|
| Frequency, MHz | 100 |
| Attenuation, dB/100 ft [dB/100m] | 0.92 [3.02] |
| Power Handling, Watts | 2600 |

**Frequency 2**

| | |
|---|---|
| Frequency, MHz | 450 |
| Attenuation, dB/100 ft [dB/100m] | 2.07 [6.79] |
| Power Handling, Watts | 1200 |

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: Low Loss 1/2 Superflexible Helical Corrugated Coax Cable with Black PE Jacket PE-1/2SFHC



Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
**Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

PASTERNACK®
www.pasternack.com

# Low Loss 1/2 Superflexible Helical Corrugated Coax Cable with Black PE Jacket

## TECHNICAL DATA SHEET PE-1/2SFHC

| | |
|---|---|
| **Frequency 3** | |
| Frequency, MHz | 900 |
| Attenuation, dB/100 ft [dB/100m] | 3.02 [9.91] |
| Power Handling, Watts | 810 |
| **Frequency 4** | |
| Frequency, MHz | 1 |
| Attenuation, dB/100 ft [dB/100m] | 3.23 [10.60] |
| Power Handling, Watts | 770 |
| **Frequency 5** | |
| Frequency, GHz | 1.8 |
| Attenuation, dB/100 ft [dB/100m] | 4.45 [14.60] |
| Power Handling, Watts | 550 |
| **Frequency 6** | |
| Frequency, GHz | 1.9 |
| Attenuation, dB/100 ft [dB/100m] | 4.57 [14.99] |
| Power Handling, Watts | 540 |
| **Frequency 7** | |
| Frequency, GHz | 2.2 |
| Attenuation, dB/100 ft [dB/100m] | 4.97 [16.31] |
| Power Handling, Watts | 490 |
| **Frequency 8** | |
| Frequency, GHz | 2.5 |
| Attenuation, dB/100 ft [dB/100m] | 5.37 [17.62] |
| Power Handling, Watts | 460 |
| **Frequency 9** | |
| Frequency, GHz | 2.7 |
| Attenuation, dB/100 ft [dB/100m] | 5.61 [18.41] |
| Power Handling, Watts | 440 |
| **Frequency 10** | |
| Frequency, GHz | 3 |
| Attenuation, dB/100 ft [dB/100m] | 5.95 [19.52] |
| Power Handling, Watts | 410 |

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: Low Loss 1/2 Superflexible Helical Corrugated Coax Cable with Black PE Jacket PE-1/2SFHC

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 Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
**Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

PASTERNACK®
www.pasternack.com

# Low Loss 1/2 Superflexible Helical Corrugated Coax Cable with Black PE Jacket

## TECHNICAL DATA SHEET PE-1/2SFHC

### Mechanical Specifications

| | | |
|---|---|---|
| **Inner Conductor:** | Number of Strands | 1 |
| | Material | Copper Clad Aluminum |
| | Diameter, in [mm] | 0.139 [3.53] |
| **Dielectric:** | Type | Foam PE |
| | Diameter, in [mm] | 0.362 [9.19] |
| **Shield:** | Number of | 1 |
| | Material 1 | Helically Corrugated Copper Tube |
| | Diameter, in [mm] | 0.468 [11.89] |
| **Jacket:** | Material | PE |
| | Diameter, in [mm] | 0.535 [13.59] |
| | Color | Black |
| Repeated Minimum Bend Radius, in [mm] | | 1.18 [29.97] |
| One Time Minimum Bend Radius, in [mm] | | 0.6 [15.24] |
| Minimum Number of Bends | | 20 |
| Tensile Strength, Lbs [Kg] | | 157 [71.21] |
| Weight, Lbs/ft [Kg/m] | | 0.129 [0.19] |
| Temperature Operating Range, deg C | | -55 to +85 |

### Compliance Certifications (visit www.Pasternack.com for current document)

| | |
|---|---|
| RoHS Compliant | Yes |

### Other Data

URL: http://www.pasternack.com/50-ohm-low-loss-corrugated-1-2-superflexible-helical-coax-pe-1-2sfhc-p.aspx

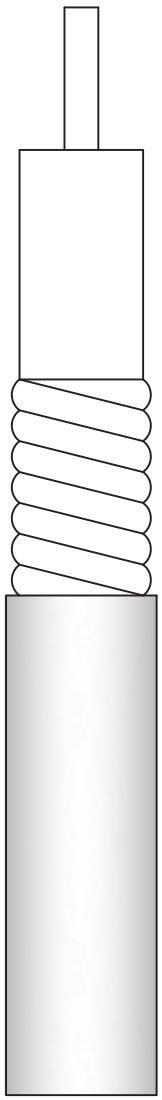
Low Loss 1/2 Superflexible Helical Corrugated Coax Cable with Black PE Jacket from Pasternack Enterprises has same day shipment for domestic and International orders. We maintain 99% availability of the industry's broadest selection of RF, microwave and fiber optic products.



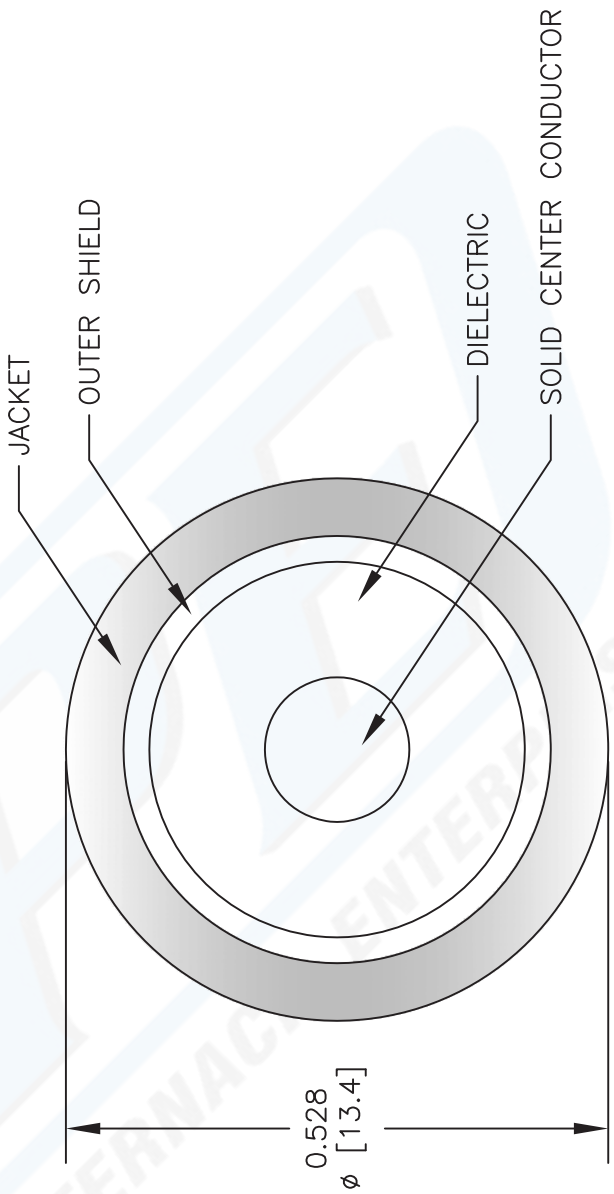
Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
**Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

# PE-1/2SFHC CAD Drawing

Low Loss 1/2 Superflexible Helical Corrugated Coax Cable with Black PE Jacket



PE-1/2SFHC




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-1/2SFHC

CAD FILE 092112 | SCALE N/A | SIZE A | 2233

FSCM NO. 53919

PASTERNACK®
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