



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

### RF Cables Technical Data Sheet

PE-1/2SFHC

#### Configuration

- Low Loss Corrugated Cable
- 1 Shield(s)

#### Features

- 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

#### 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      |              | 10.2    | GHz          |
| Cutoff Frequency                     |         | 13           |         | GHz          |
| Impedance                            |         | 50           |         | Ohms         |
| Velocity of Propagation              |         | 82           |         | %            |
| Shielding Effectiveness              | 120     |              |         | dB           |
| Operating Voltage (AC)               |         |              | 1,000   | Vrms         |
| Dielectric Withstanding Voltage (AC) |         |              | 2,500   | Vrms         |
| Inner Conductor DC Resistance        |         |              | 0.91    | Ohms/1000ft  |
| Outer Conductor DC Resistance        |         |              | 1.08    | Ohms/1000ft  |
| Nominal Capacitance                  |         | 25.3 [83.01] |         | 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 1/2 inch Superflexible Corrugated Coax Cable with Black PE Jacket PE-1/2SFHC](#)



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#### Performance by Frequency Band

| Description           | F1    | F2    | F3    | F4    | F5    | Units    |
|-----------------------|-------|-------|-------|-------|-------|----------|
| Frequency             | 0.1   | 0.45  | 0.9   | 1     | 1.8   | GHz      |
| Attenuation, Typ      | 1.01  | 2.22  | 3.22  | 3.41  | 4.72  | dB/100ft |
|                       | 3.31  | 7.28  | 10.56 | 11.19 | 15.49 | dB/100m  |
| Input Power (CW), Max | 2,590 | 1,180 | 810   | 770   | 560   | Watts    |

| Description           | F6    | F7    | F8    | F9    | F10   | Units    |
|-----------------------|-------|-------|-------|-------|-------|----------|
| Frequency             | 2     | 3     | 4     | 5     | 6     | GHz      |
| Attenuation, Typ      | 5.01  | 6.3   | 7.44  | 8.48  | 9.44  | dB/100ft |
|                       | 16.44 | 20.67 | 24.41 | 27.82 | 30.97 | dB/100m  |
| Input Power (CW), Max | 530   | 420   | 350   | 31    | 280   | Watts    |

#### Mechanical Specifications

|                                 |                         |
|---------------------------------|-------------------------|
| Diameter                        | 0.519 in [13.18 mm]     |
| Weight                          | 0.132 lbs/ft [0.2 Kg/m] |
| Number of Bends, Min            | 20                      |
| Min. Bend Radius (Installation) | 0.6 in [15.24 mm]       |
| Min. Bend Radius (Repeated)     | 1.18 in [29.97 mm]      |
| Tensile Strength                | 79 lbs [35.83 kg]       |

#### Construction Specifications

| Description     | Material and Plating              | Diameter            |
|-----------------|-----------------------------------|---------------------|
| Inner Conductor | Copper Clad Aluminum <sup>1</sup> | 0.141 in 3.58 mm    |
| Conductor Type  | Solid                             |                     |
| Dielectric      | PE (F)                            | 0.378 in 9.6 mm     |
| Outer Conductor | Helically Corrugated Copper Tube  | 0.468 in 11.89 mm   |
| Jacket          | PE, Black                         | 0.519 in [13.18 mm] |

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

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#### 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 1/2 inch Superflexible 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.

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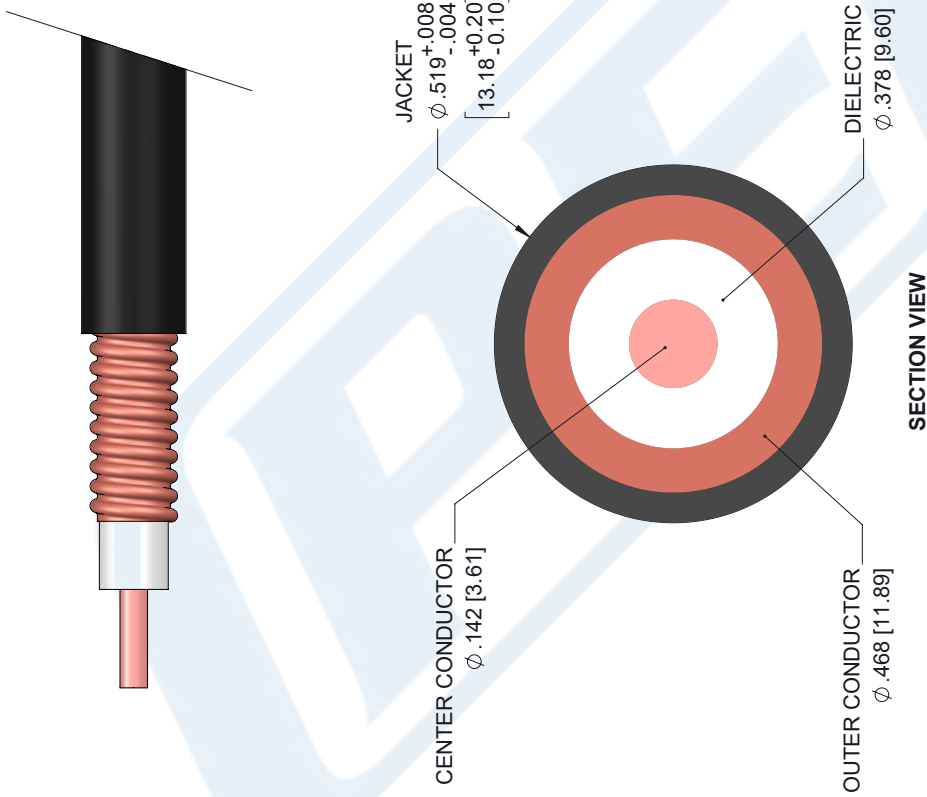
URL: <https://www.pasternack.com/50-ohm-low-loss-corrugated-1-2-superflexible-helical-coax-pe-1-2sfhc-p.aspx>

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# PE-1/2SFHC CAD Drawing

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

| REVISIONS |                         |          |          |
|-----------|-------------------------|----------|----------|
| REV.      | DESCRIPTION             | DATE     | APPROVED |
| 1.1       | PCR PE-1/2SFHC 20190708 | 07/16/19 | S.ELLIS  |



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|--|--|---|--|
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| FRACTIONS<br>±1/32<br>ANGLES ± 1°  |  | PASTERNAK<br>an INFINITO brand<br>Pasternack Enterprises, Inc.<br>P.O. Box 16759, Irvine, CA 92623.<br>Phone: 1.949.261.1920   1.866.727.8376<br>Fax: 1.949.261.7451<br>www.pasternack.com   e-mail: sales@pasternack.com |  |
| ALL DIMENSIONS SHOWN<br>ARE FOR REFERENCE ONLY.  |  | DRAWN BY K.DANG<br>PART NUMBER PE-1/2SFHC<br>REV 1.1  |  |
| THIRD-ANGLE PROJECTION   |  | SIZE A<br>CAGE 53919  |  |

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