

2.2-5 Female to 4.3-10 Male Low PIM Cable 50 CM
Length Using 1/4 inch Superflexible Coax



RF Cable Assemblies Technical Data Sheet

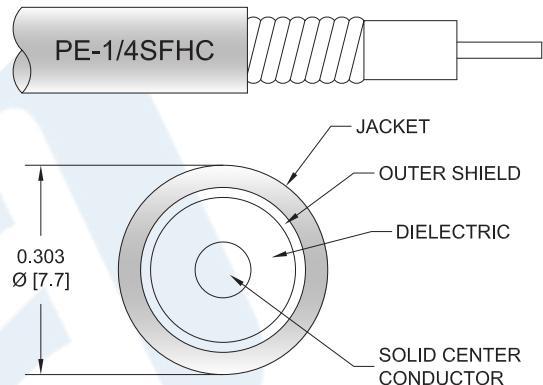
PE3C8055-50CM

Configuration

- Connector 1: 2.2-5 Female
- Connector 2: 4.3-10 Male
- Cable Type: 1/4" Superflexible

Features

- Max Frequency 6 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 120 dB
- 82% Phase Velocity
- PE Jacket
- Low PIM and Low Loss
- 100% Tested with PIM Test Results Marked on Cable



Applications

- General Purpose
- Laboratory Use
- Low PIM Applications
- Distributed Antenna Systems (DAS)
- PIM Testing

Description

Pasternack's PE3C8055-50CM 2.2-5 female to 4.3-10 male 50 cm cable using 1/4 inch superflexible coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack 2.2-5 to 4.3-10 cable assembly has a female to male gender configuration with 50 ohm corrugated 1/4" superflexible coax. The PE3C8055-50CM 2.2-5 female to 4.3-10 male cable assembly operates to 6 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

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 Female to 4.3-10 Male Low PIM Cable 50 CM Length Using 1/4 inch Superflexible Coax PE3C8055-50CM](#)

2.2-5 Female to 4.3-10 Male Low PIM Cable 50 CM Length Using 1/4 inch Superflexible Coax



RF Cable Assemblies Technical Data Sheet

PE3C8055-50CM

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|--------------|---------|-----------------|
| Frequency Range | DC | | 6 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 82 | | % |
| RF Shielding | 120 | | | dB |
| Passive Intermodulation | | | -160 | dBc |
| Capacitance | | 24.4 [80.05] | | pF/ft [pF/m] |
| Inductance | | 0.059 [0.19] | | uH/ft [uH/m] |
| DC Resistance Inner Conductor | | 3.2 [10.5] | | Ω/1000ft [Ω/Km] |
| DC Resistance Outer Conductor | | 2.53 [8.3] | | Ω/1000ft [Ω/Km] |
| Jacket Spark | | | 2,000 | Vrms |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 0.1 | 0.25 | 0.5 | 1 | 3 | GHz |
| Insertion Loss (Typ.) | 0.22 | 0.24 | 0.25 | 0.29 | 0.37 | dB |

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.2dB of connector loss.

Mechanical Specifications

Cable Assembly

| | |
|----------|----------------------|
| Length* | 19.68 in [499.87 mm] |
| Diameter | 0.94 in [23.88 mm] |

Cable

| | |
|--------------------------------------|----------------------------------|
| Cable Type | 1/4" Superflexible |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper Clad Aluminum |
| Dielectric Type | PE (F) |
| Number of Shields | 1 |
| Shield Layer 1 | Helically Corrugated Copper Tube |
| Jacket Material | PE, Black |
| Jacket Diameter | 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: [2.2-5 Female to 4.3-10 Male Low PIM Cable 50 CM Length Using 1/4 inch Superflexible Coax PE3C8055-50CM](#)



2.2-5 Female to 4.3-10 Male Low PIM Cable 50 CM Length Using 1/4 inch Superflexible Coax

RF Cable Assemblies Technical Data Sheet

PE3C8055-50CM

| | |
|------------------------------|-------------------|
| One Time Minimum Bend Radius | 0.5 in [12.7 mm] |
| Repeated Minimum Bend Radius | 1 in [25.4 mm] |
| Typical Flex Cycles | 20 |
| Tensile Strength | 79 lbs [35.83 Kg] |

Connectors

| Description | Connector 1 | Connector 2 |
|--------------------------------------|------------------|------------------|
| Type | 2.2-5 Female | 4.3-10 Male |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Bronze, Silver | Brass, Silver |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | Bronze, Silver | |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Material and Plating | | Brass, Tri-Metal |

Environmental Specifications

Temperature

Operating Range

-40 to +85 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 Female to 4.3-10 Male Low PIM Cable 50 CM Length Using 1/4 inch Superflexible Coax PE3C8055-50CM](#)

2.2-5 Female to 4.3-10 Male Low PIM Cable 50 CM
Length Using 1/4 inch Superflexible Coax



RF Cable Assemblies Technical Data Sheet

PE3C8055-50CM

How to Order

Part Number Configuration:

PE3C8055

- **xx**

uu

Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3C8055-12 = 12 inches long cable
PE3C8055-100cm = 100 cm long cable

2.2-5 Female to 4.3-10 Male Low PIM Cable 50 CM Length Using 1/4 inch Superflexible Coax 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 Female to 4.3-10 Male Low PIM Cable 50 CM Length Using 1/4 inch Superflexible Coax PE3C8055-50CM](#)

URL: <https://www.pasternack.com/2.2-5-female-4.3-10-male-pe-1-4-sfhc-cable-pe3c8055-50cm-p.aspx>

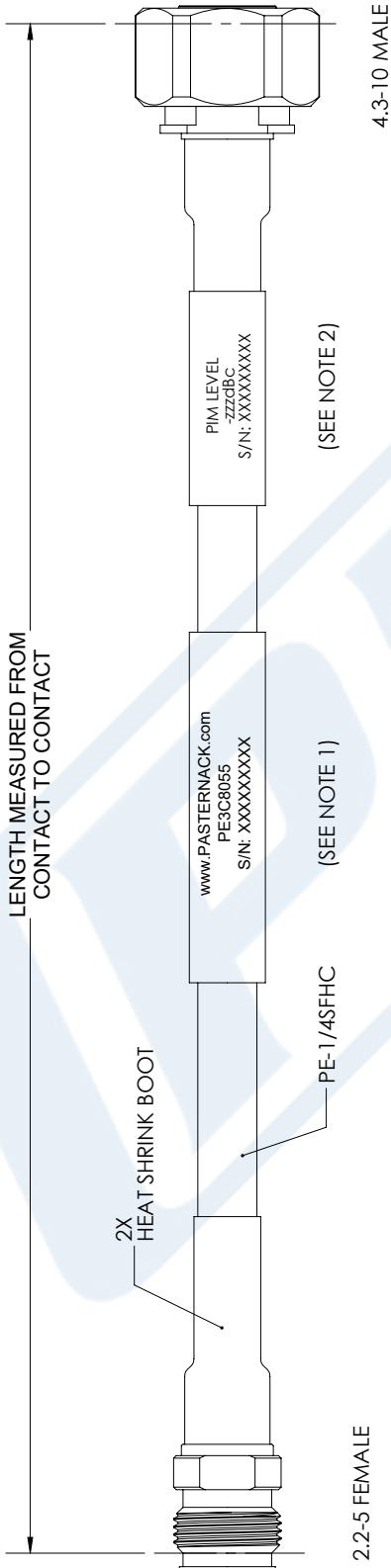
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

PE3C8055-50CM CAD Drawing

2.2-5 Female to 4.3-10 Male Low PIM Cable 50 CM

Length Using 1/4 inch Superflexible Coax

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



| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------|----------------------|-----------|-----------------|-------|------------|------------------|-------|----------------------|------------------------------|--|--|-------------|-------|------------------|-------------------------------|------------------|---------------------------------|-------------------|----------------------------------|-------------------|--------------------------------|--|--|--|--|--------------------------------------|--------------------------|--------------|
| <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS TOLERANCES:</p> <table border="0"> <tr> <td>$X = \pm .2$</td><td>[.08]</td><td>FRACTIONS</td></tr> <tr> <td>$.XX = \pm .02$</td><td>[.51]</td><td>$\pm 1/32$</td></tr> <tr> <td>$XXX = \pm .005$</td><td>[.13]</td><td>ANGLES $\pm 1^\circ$</td></tr> <tr> <td colspan="3">CABLE LENGTH (L) TOLERANCES:</td></tr> <tr> <td>$L \leq 12$</td><td>[305]</td><td>$= +1 [25] / -0$</td></tr> <tr> <td>$12 [305] < L \leq 60 [1524]$</td><td>$= +2 [51] / -0$</td></tr> <tr> <td>$60 [1524] < L \leq 120 [3048]$</td><td>$= +4 [102] / -0$</td></tr> <tr> <td>$120 [3048] < L \leq 300 [7620]$</td><td>$= +6 [152] / -0$</td></tr> <tr> <td colspan="3">300 [7620] < L = $+5\% L / -0$</td></tr> </table> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> | $X = \pm .2$ | [.08] | FRACTIONS | $.XX = \pm .02$ | [.51] | $\pm 1/32$ | $XXX = \pm .005$ | [.13] | ANGLES $\pm 1^\circ$ | CABLE LENGTH (L) TOLERANCES: | | | $L \leq 12$ | [305] | $= +1 [25] / -0$ | $12 [305] < L \leq 60 [1524]$ | $= +2 [51] / -0$ | $60 [1524] < L \leq 120 [3048]$ | $= +4 [102] / -0$ | $120 [3048] < L \leq 300 [7620]$ | $= +6 [152] / -0$ | 300 [7620] < L = $+5\% L / -0$ | | | <p>THIRD ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.</p> | <p>PASTERNAK an INFINITE brand</p> <p>Pasternak 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.pasternak.com E-mail: sales@pasternak.com</p> | <p>SHEET 1 OF 1</p> <p>SCALE N/A</p> | <p>ITEM NO. PE3C8055</p> | <p>REV A</p> |
| $X = \pm .2$ | [.08] | FRACTIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $.XX = \pm .02$ | [.51] | $\pm 1/32$ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $XXX = \pm .005$ | [.13] | ANGLES $\pm 1^\circ$ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CABLE LENGTH (L) TOLERANCES: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $L \leq 12$ | [305] | $= +1 [25] / -0$ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $12 [305] < L \leq 60 [1524]$ | $= +2 [51] / -0$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $60 [1524] < L \leq 120 [3048]$ | $= +4 [102] / -0$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $120 [3048] < L \leq 300 [7620]$ | $= +6 [152] / -0$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 300 [7620] < L = $+5\% L / -0$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

NOTES

1. CABLES 84" AND UNDER HAVE 1 LABEL CENTERED, CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END 12.0" FROM THE END OF THE CONNECTOR.
2. 6" FROM CABLE END 1 PLACE FOR ALL LENGTHS OF CABLE.

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE
WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.