



NEX10 Male Right Angle to NEX10 Male Right Angle  
Low PIM Cable Using 1/4 inch Superflexible Coax

**RF Cable Assemblies Technical Data Sheet**

**PE3C7853**

**Configuration**

- Connector 1: NEX10 Male Right Angle
- Connector 2: NEX10 Male Right Angle
- Cable Type: 1/4" Superflexible

**Features**

- Max Frequency 6 GHz
- Low PIM: -150 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)
- Low PIM Applications and PIM Testing

**Description**

Pasternack's PE3C7853 NEX10 male right angle to NEX10 male right angle 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 NEX10 to NEX10 cable assembly has a male to male gender configuration with 50 ohm corrugated 1/4" superflexible coax. The PE3C7853 NEX10 male to NEX10 male cable assembly operates to 6 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -150 dBc. The right angle NEX10 interfaces on the 1/4" superflexible cable allow for easier connections in tight spaces.

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: [NEX10 Male Right Angle to NEX10 Male Right Angle Low PIM Cable Using 1/4 inch Superflexible Coax PE3C7853](#)



## NEX10 Male Right Angle to NEX10 Male Right Angle Low PIM Cable Using 1/4 inch Superflexible Coax

### RF Cable Assemblies Technical Data Sheet

**PE3C7853**

#### Electrical Specifications

| Description                   | Minimum | Typical      | Maximum | Units           |
|-------------------------------|---------|--------------|---------|-----------------|
| Frequency Range               | DC      |              | 6       | GHz             |
| VSWR                          |         |              | 1.5:1   |                 |
| Velocity of Propagation       |         | 82           |         | %               |
| RF Shielding                  | 120     |              |         | dB              |
| Passive Intermodulation       |         |              | -150    | 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.) | 0.016 | 0.026 | 0.039 | 0.057 | 0.107 | dB/ft |
|                       | 0.05  | 0.09  | 0.13  | 0.19  | 0.35  | dB/m  |

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.3dB connector loss.

#### Mechanical Specifications

##### Cable Assembly

Diameter 0.47 in [11.94 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: [NEX10 Male Right Angle to NEX10 Male Right Angle Low PIM Cable Using 1/4 inch Superflexible Coax PE3C7853](#)



NEX10 Male Right Angle to NEX10 Male Right Angle  
Low PIM Cable Using 1/4 inch Superflexible Coax

## RF Cable Assemblies Technical Data Sheet

**PE3C7853**

|                              |                   |
|------------------------------|-------------------|
| 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                         | NEX10 Male Right Angle | NEX10 Male Right Angle |
| Specification                | NEX10                  | NEX10                  |
| Impedance                    | 50 Ohms                | 50 Ohms                |
| Contact Material and Plating | Brass, Silver          | Brass, Silver          |
| Dielectric Type              | PTFE                   | PTFE                   |
| Body Material and Plating    | Brass, Tri-Metal       | 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: [NEX10 Male Right Angle to NEX10 Male Right Angle Low PIM Cable Using 1/4 inch Superflexible Coax PE3C7853](#)



NEX10 Male Right Angle to NEX10 Male Right Angle  
Low PIM Cable Using 1/4 inch Superflexible Coax

**RF Cable Assemblies Technical Data Sheet**

**PE3C7853**

**How to Order**

Part Number Configuration:

**PE3C7853**

- **xx**

**uu**

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

Example: PE3C7853-12 = 12 inches long cable  
PE3C7853-100cm = 100 cm long cable

NEX10 Male Right Angle to NEX10 Male Right Angle Low PIM Cable 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: [NEX10 Male Right Angle to NEX10 Male Right Angle Low PIM Cable Using 1/4 inch Superflexible Coax PE3C7853](https://www.pasternack.com/nex10-male-nex10-male-pe-1-4-sfhc-cable-assembly-pe3c7853-p.aspx)

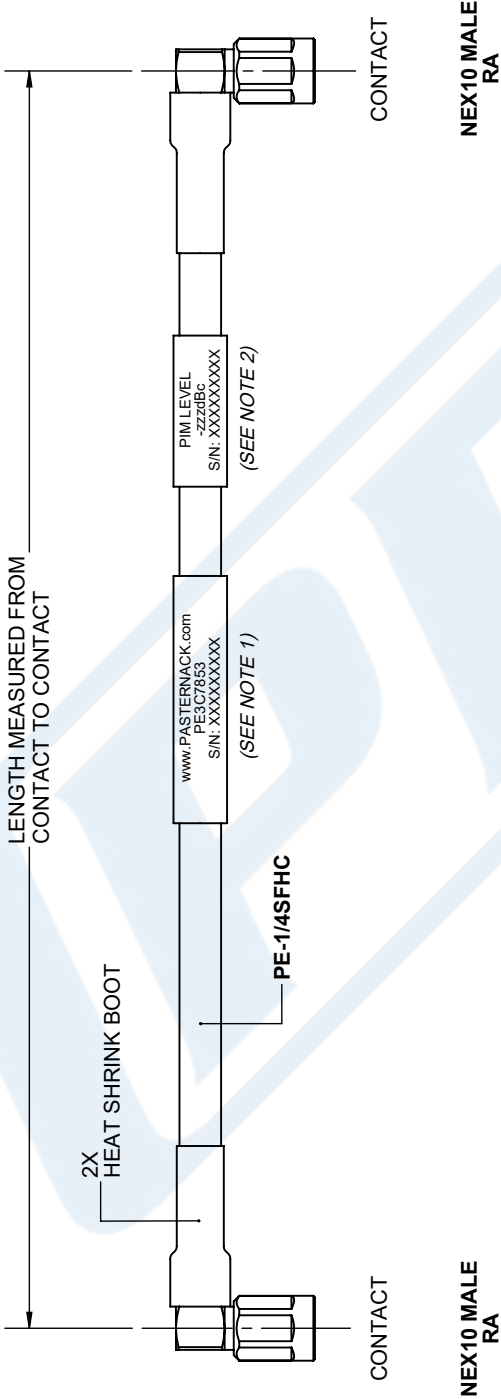
URL: <https://www.pasternack.com/nex10-male-nex10-male-pe-1-4-sfhc-cable-assembly-pe3c7853-p.aspx>

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.

# PE3C7853 CAD Drawing

NEX10 Male Right Angle to NEX10 Male Right Angle Low PIM  
Cable Using 1/4 inch Superflexible Coax

| REVISIONS |                 |           |          |
|-----------|-----------------|-----------|----------|
| REV.      | DESCRIPTION     | DATE      | APPROVED |
| A         | INITIAL RELEASE | 1/15/2021 | S. ELLIS |



## 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.

|                                                                                                  |  |                                                                                                                       |  |
|--------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------|--|
| UNLESS OTHERWISE SPECIFIED<br>LEADING DIMENSIONS ARE INCHES<br>DIMENSIONS IN [ ] ARE MILLIMETERS |  | THIRD-ANGLE PROJECTION                                                                                                |  |
| TOLERANCES:                                                                                      |  | THE INFORMATION AND<br>DESIGN IN THIS DOCUMENT<br>IS THE PROPERTY OF<br>PASTERNAK CORPORATION<br>ALL RIGHTS RESERVED. |  |
| X = ± .2 [ .508 ]                                                                                |  | SHEET 1 OF 1                                                                                                          |  |
| .XX = ± .02 [ .51 ]                                                                              |  | SCALE N/A                                                                                                             |  |
| .XXX = ± .005 [ .13 ]                                                                            |  | REV A                                                                                                                 |  |
| CABLE LENGTH (L) TOLERANCES:                                                                     |  | ITEM NO. PE3C7853                                                                                                     |  |
| L ≤ 12 [ 305 ] = +1 [ 25 ] / -0                                                                  |  | DRAWN BY K.DANG                                                                                                       |  |
| 12 [ 305 ] < L ≤ 60 [ 1524 ] = +2 [ 51 ] / -0                                                    |  | SIZE A                                                                                                                |  |
| 60 [ 1524 ] < L ≤ 120 [ 3048 ] = +4 [ 102 ] / -0                                                 |  | CAGE CODE 53919                                                                                                       |  |
| 120 [ 3048 ] < L ≤ 300 [ 7620 ] = +6 [ 152 ] / -0                                                |  | ALL DIMENSIONS SHOWN<br>ARE FOR REFERENCE ONLY.                                                                       |  |
| 300 [ 7620 ] < L = +5% / -0                                                                      |  | E-MAIL: sales@pasternack.com                                                                                          |  |
|                                                                                                  |  | 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                                                                                           |  |
|                                                                                                  |  | PASTERNAK®<br>an INFINITE® brand                                                                                      |  |
|                                                                                                  |  | Pasternack Enterprises, Inc.                                                                                          |  |