

## NEX10 Male to NEX10 Male Right Angle Low PIM Cable Using SPP-250-LLPL Coax

**PE3W17873**



### Configuration

- Connector 1: NEX10 Male
- Connector 2: NEX10 Male Right Angle
- Cable Type: SPP-250-LLPL
- Coax Flex Type: Corrugated

### Features

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 100 dB
- 76% Phase Velocity
- FEP Jacket



### Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

### Description

Pasternack's PE3W17873 NEX10 male to NEX10 male right angle cable using SPP-250-LLPL 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 SPP-250-LLPL coax. The PE3W17873 NEX10 male to NEX10 male cable assembly operates to 5.8 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc. The right angle NEX10 interface on the SPP-250-LLPL cable allows 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.

### Electrical Specifications

| Description                   | Minimum | Typical      | Maximum | Units                 |
|-------------------------------|---------|--------------|---------|-----------------------|
| Frequency Range               | DC      |              | 5.8     | GHz                   |
| VSWR                          |         |              | 1.4:1   |                       |
| Velocity of Propagation       |         | 76           |         | %                     |
| RF Shielding                  | 100     |              |         | dB                    |
| Passive Intermodulation       |         |              | -160    | dBc                   |
| Capacitance                   |         | 27 [88.58]   |         | pF/ft [pF/m]          |
| Inductance                    |         | 0.067 [0.22] |         | uH/ft [uH/m]          |
| DC Resistance Inner Conductor |         | 3 [9.84]     |         | Ohms/1000ft [Ohms/Km] |

### Specifications by Frequency

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### PE3W17873

| Part Number    | Length                   | Description           | F1   | F2   | F3    | F4    | F5    | Units | Weight (lbs) |
|----------------|--------------------------|-----------------------|------|------|-------|-------|-------|-------|--------------|
|                |                          | Frequency             | 450  | 500  | 1000  | 2500  | 5800  | MHz   |              |
| PE3W17873      | Custom Lengths Available | Insertion Loss (Typ.) | 0.04 | 0.04 | 0.054 | 0.093 | 0.148 | dB/ft |              |
|                |                          |                       | 0.13 | 0.13 | 0.18  | 0.31  | 0.49  | dB/m  |              |
| PE3W17873-12   | 12 inch                  | Insertion Loss (Typ.) | 0.34 | 0.34 | 0.36  | 0.4   | 0.45  | dB    | 0.12         |
| PE3W17873-24   | 24 inch                  | Insertion Loss (Typ.) | 0.38 | 0.38 | 0.41  | 0.49  | 0.6   | dB    | 0.191        |
| PE3W17873-36   | 36 inch                  | Insertion Loss (Typ.) | 0.42 | 0.42 | 0.47  | 0.58  | 0.75  | dB    | 0.261        |
| PE3W17873-60   | 60 inch                  | Insertion Loss (Typ.) | 0.49 | 0.5  | 0.57  | 0.77  | 1.04  | dB    | 0.401        |
| PE3W17873-50CM | 50 CM                    | Insertion Loss (Typ.) | 0.37 | 0.37 | 0.39  | 0.46  | 0.55  | dB    | 0.165        |

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

|                             |                |
|-----------------------------|----------------|
| Loss due to Connector 1:    | 0.1 dB         |
| Loss due to Connector 2:    | 0.2 dB         |
| Base Weight:                | 0.12 pounds    |
| Additional Weight per Inch: | 0.00584 pounds |

### Mechanical Specifications

#### Cable Assembly

|                |                    |
|----------------|--------------------|
| Width/Diameter | 0.5 in [12.7 mm]   |
| Weight         | 0.12 lbs [54.43 g] |

#### Cable

|                                        |                       |
|----------------------------------------|-----------------------|
| Cable Type                             | SPP-250-LLPL          |
| Impedance                              | 50 Ohms               |
| Inner Conductor Type                   | Solid                 |
| Inner Conductor Material and Plating   | Copper                |
| Dielectric Type                        | PTFE                  |
| Number of Shields                      | 1                     |
| Outer Conductor 1 Material and Plating | Copper                |
| Jacket Material                        | FEP, Blue             |
| Jacket Diameter                        | 0.28 in [7.11 mm]     |
| One Time Minimum Bend Radius           | 1.25 in [31.75 mm]    |
| Bending Moment                         | 0.8 lbs-ft [1.08 N-m] |

### Connectors

| Description                       | Connector 1      | Connector 2            |
|-----------------------------------|------------------|------------------------|
| Type                              | NEX10 Male       | NEX10 Male Right Angle |
| Impedance                         | 50 Ohms          | 50 Ohms                |
| Configuration                     | Straight         | Right Angle            |
| Contact Material and Plating      | Brass, Silver    | Brass, Silver          |
| Dielectric Type                   | PTFE             | PTFE                   |
| Body Material and Plating         | Brass, Tri-Metal | Brass, Tri-Metal       |
| Coupling Nut Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal       |

## NEX10 Male to NEX10 Male Right Angle Low PIM Cable Using SPP-250-LLPL Coax



### PE3W17873

#### Environmental Specifications

Operating Range Temperature -40 to +155 deg C

**Compliance Certifications** (see [product page](#) for current document)

#### Plotted and Other Data

Notes:

#### Typical Performance Data

#### How to Order

Part Number Configuration: **PE3W17873**    **- xx**    **uu**

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

Example: PE3W17873-12 = 12 inches long cable  
PE3W17873-100cm = 100 cm long cable

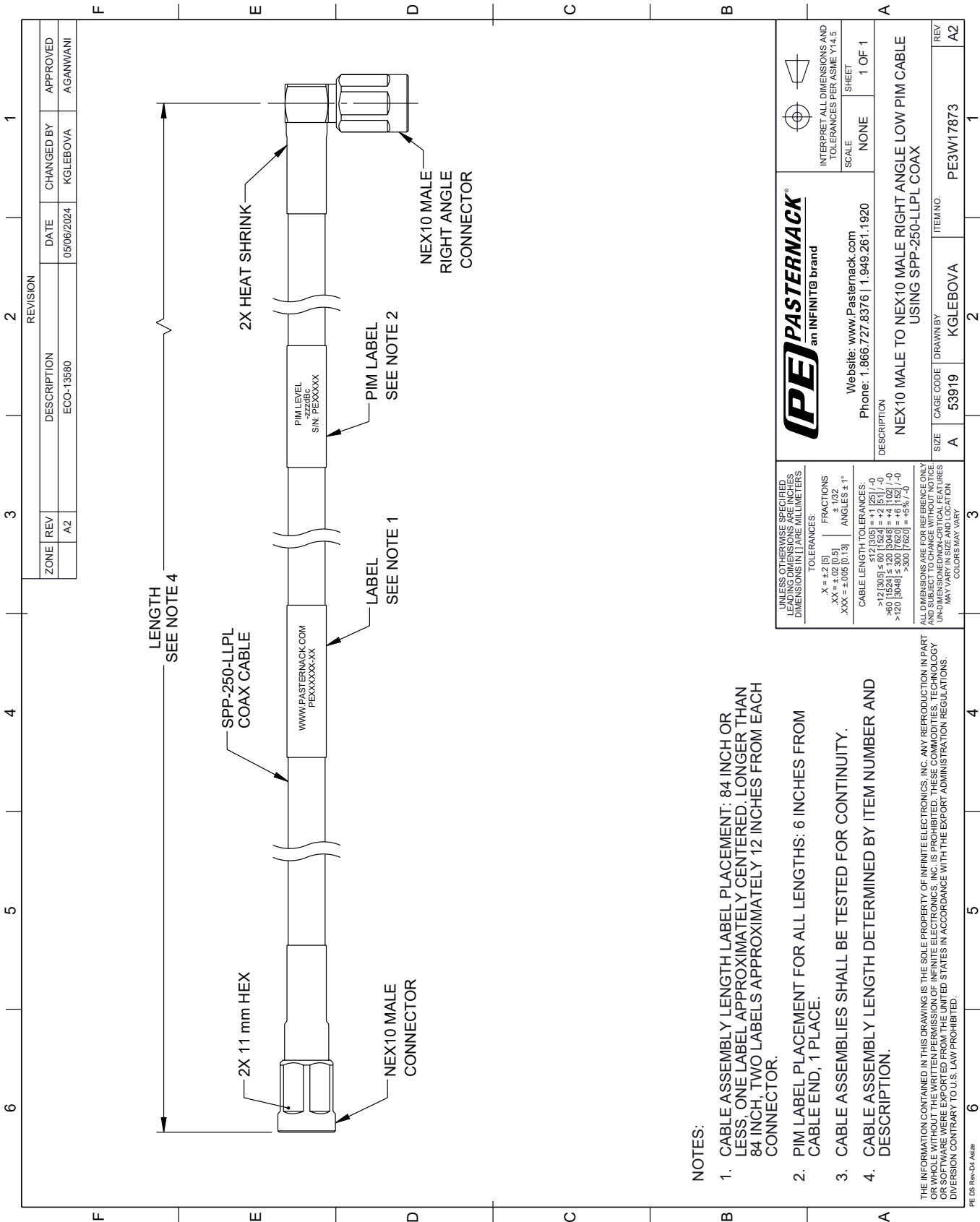
NEX10 Male to NEX10 Male Right Angle Low PIM Cable Using SPP-250-LLPL Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [NEX10 Male to NEX10 Male Right Angle Low PIM Cable Using SPP-250-LLPL Coax PE3W17873](#)

URL: <https://www.pasternack.com/nex10-male-to-nex10-male-low-pim-cable-using-spp-250-llpl-pe3w17873-p.aspx>

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PE3W17873 CAD Drawing
NEX10 Male to NEX10 Male Right Angle Low PIM Cable Using SPP-250-LLPL Coax



- NOTES:
- 1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 84 INCH OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 84 INCH, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
- 2. PIM LABEL PLACEMENT FOR ALL LENGTHS: 6 INCHES FROM CABLE END, 1 PLACE.
- 3. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
- 4. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM NUMBER AND DESCRIPTION.

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------|
| <b>PE PASTERNAK</b><br>an INFINITE brand                                                                                                                                                                                                                                                                                                                                                                                                                                                         |           | Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a><br>Phone: 1.866.727.8376   1.949.261.1920 |           | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5<br>SCALE: NONE<br>SHEET: 1 OF 1 |
| UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE MILLIMETERS<br>TOLERANCES:<br>X = ±.2 [5]<br>.XX = ±.02 [0.5]<br>.XXX = ±.005 [0.13]<br>FRACTIONS: ± 1/32<br>ANGLES ± 1°<br>CABLE LENGTH TOLERANCES:<br>>12 [305] ≤ 60 [1524] = ±.125 [-.0]<br>>60 [1524] ≤ 120 [3048] = ±.125 [-.0]<br>>120 [3048] ≤ 300 [7620] = ±.125 [-.0]<br>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY. |           | DESCRIPTION<br>NEX10 MALE TO NEX10 MALE RIGHT ANGLE LOW PIM CABLE USING SPP-250-LLPL COAX                     |           | REV                                                                                    |
| SIZE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CAGE CODE | DRAWN BY                                                                                                      | ITEM NO.  | REV                                                                                    |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 53919     | KGLEBOVA                                                                                                      | PE3W17873 | A2                                                                                     |