



## Outdoor Rated N Male to N Male Low PIM Cable 12 Inch Length Using SPO-250 Coax Using Times Microwave Parts

### RF Cable Assemblies Technical Data Sheet

PE3C6345-12

#### Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: SPO-250

#### Features

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- 83% Phase Velocity
- PE Jacket
- 500 Mating Cycles
- 100% Tested with PIM Test Results Marked on Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)
- Using Times Microwave Components



#### Applications

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

#### Description

Pasternack's PE3C6345-12 type N male to type N male 12 inch cable using SPO-250 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 type N to type N cable assembly has a male to male gender configuration with 50 ohm corrugated SPO-250 coax. The PE3C6345-12 type N male to type N 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. Times Microwave cable is used in each assembly and TMS components are used to form connections with the super flexible low PIM cable. These cable assemblies are expertly built to satisfy your specific need with high quality Times Microwave Systems manufactured parts.

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: [Outdoor Rated N Male to N Male Low PIM Cable 12 Inch Length Using SPO-250 Coax Using Times Microwave Parts PE3C6345-12](#)



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### Electrical Specifications

| Description             | Minimum | Typical      | Maximum | Units        |
|-------------------------|---------|--------------|---------|--------------|
| Frequency Range         | DC      |              | 5.8     | GHz          |
| VSWR                    |         |              | 1.4:1   |              |
| Velocity of Propagation |         | 83           |         | %            |
| Passive Intermodulation |         | -165         | -160    | dBc          |
| Capacitance             |         | 24 [78.74]   |         | pF/ft [pF/m] |
| Inductance              |         | 0.054 [0.18] |         | uH/ft [uH/m] |

### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.45 | 0.7  | 1    | 2.5  | 5.8  | GHz   |
| Insertion Loss (Max.) | 0.18 | 0.22 | 0.27 | 0.42 | 0.65 | dB    |

#### Electrical Specification Notes:

PIM test results vary between cables

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1\*SQRT(FGHz) dB per connector.

### Mechanical Specifications

#### Cable Assembly

|          |                  |
|----------|------------------|
| Length*  | 12 in [304.8 mm] |
| Diameter | 0.63 in [16 mm]  |

#### Cable

|                                      |                                  |
|--------------------------------------|----------------------------------|
| Cable Type                           | SPO-250                          |
| Impedance                            | 50 Ohms                          |
| Inner Conductor Type                 | Solid                            |
| Inner Conductor Material and Plating | Copper Clad Aluminum             |
| Dielectric Type                      | Foam PE                          |
| Number of Shields                    | 1                                |
| Shield Layer 1                       | Helically Corrugated Copper Tube |
| Outer Conductor Material and Plating | Copper                           |
| Jacket Material                      | PE, Black                        |
| Jacket Diameter                      | 0.303 in [7.7 mm]                |

|                              |                       |
|------------------------------|-----------------------|
| One Time Minimum Bend Radius | 1.25 in [31.75 mm]    |
| Bending Moment               | 0.5 lbs-ft [0.68 N-m] |

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### Connectors

| Description                        | Connector 1          | Connector 2          |
|------------------------------------|----------------------|----------------------|
| Type                               | N Male               | N Male               |
| Impedance                          | 50 Ohms              | 50 Ohms              |
| Mating Cycles                      | 500                  | 500                  |
| Contact Material and Plating       | Brass, Silver        | Brass, Silver        |
| Contact Plating Specification      | 200 µin              | 200 µin              |
| Dielectric Type                    | PTFE                 | PTFE                 |
| Body Material and Plating          | Brass, Tri-Metal     | Brass, Tri-Metal     |
| Body Plating Specification         | 80 µin               | 80 µin               |
| Coupling Nut Material and Plating  | Brass, Tri-Metal     | Brass, Tri-Metal     |
| Coupling Nut Plating Specification | 80 µin               | 80 µin               |
| Torque                             | 9.74 in-lbs [1.1 Nm] | 9.74 in-lbs [1.1 Nm] |

### Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8"$ , whichever is greater.

### Environmental Specifications

#### Temperature

|                 |                   |
|-----------------|-------------------|
| Operating Range | -55 to +200 deg C |
| Storage Range   | -55 to +200 deg C |

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

### Plotted and Other Data

#### Notes:

- Values at 25°C, sea level.

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### Typical Performance Data



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## Outdoor Rated N Male to N Male Low PIM Cable 12 Inch Length Using SPO-250 Coax Using Times Microwave Parts

### RF Cable Assemblies Technical Data Sheet

PE3C6345-12

#### How to Order

Part Number Configuration:

**PE3C6345**

- **xx**

**uu**

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

Example: PE3C6345-12 = 12 inches long cable  
PE3C6345-100cm = 100 cm long cable

Outdoor Rated N Male to N Male Low PIM Cable 12 Inch Length Using SPO-250 Coax Using Times Microwave Parts 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: [Outdoor Rated N Male to N Male Low PIM Cable 12 Inch Length Using SPO-250 Coax Using Times Microwave Parts PE3C6345-12](https://www.pasternack.com/n-male-n-male-spo250-cable-assembly-pe3c6345-12-p.aspx)

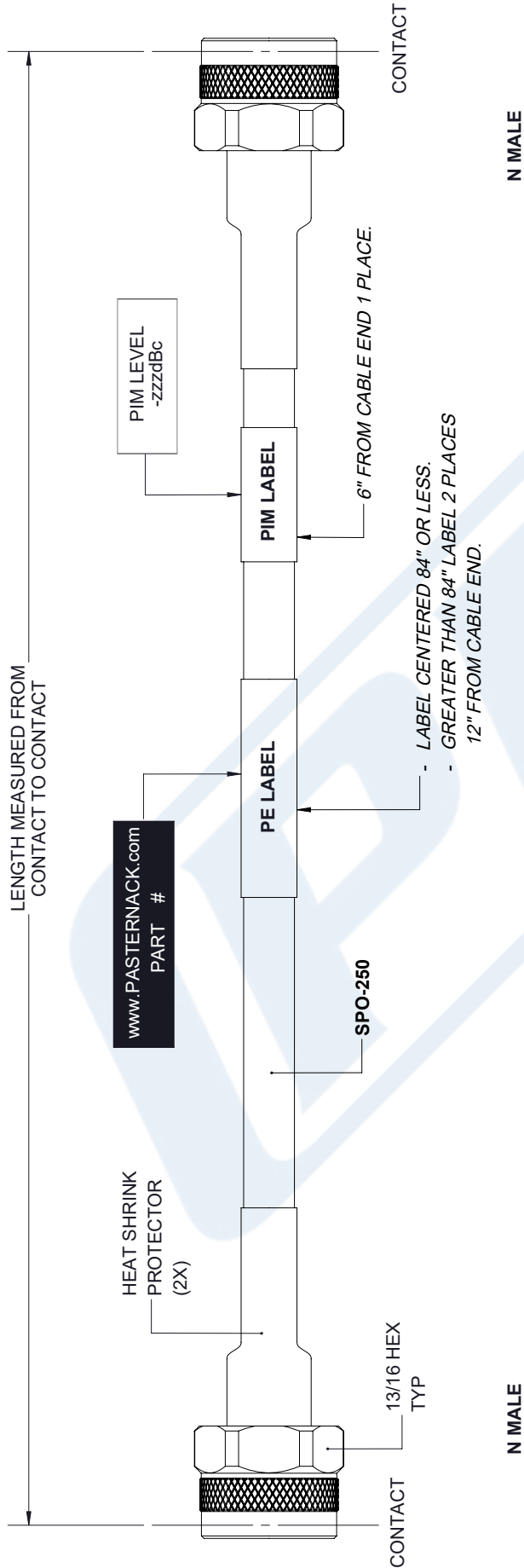
URL: <https://www.pasternack.com/n-male-n-male-spo250-cable-assembly-pe3c6345-12-p.aspx>

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# PE3C6345-12 CAD Drawing

Outdoor Rated N Male to N Male Low PIM Cable 12 Inch Length  
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| REVISIONS |                 |          |          |
|-----------|-----------------|----------|----------|
| REV.      | DESCRIPTION     | DATE     | APPROVED |
| A         | INITIAL RELEASE | 05/16/19 | SELLIS   |



|  |             |
|--|-------------|
| UNLESS OTHERWISE SPECIFIED<br>LEADING DIMENSIONS ARE INCHES<br>DIMENSIONS IN [ ] ARE MILLIMETERS |             |
| TOLERANCES:  | FRACTIONS   |
| X±.2 [5.08]  | ±.132       |
| .XX±.01 [.25]  | ±.13        |
| .XXX±.005 [.13]  | ANGLES ± 1° |
| ALL DIMENSIONS SHOWN<br>ARE FOR REFERENCE ONLY.  |             |
| THIRD-ANGLE PROJECTION   |             |

|   |             |
|---|-------------|
| <b>PE PASTERNAK</b><br>an INFINITI brand  |             |
| 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 |             |
| SIZE  | PART NUMBER |
| A   | 53919       |
| DRAWN BY  | REV         |
| K.DANG  | PE3C6345    |
| SCALE   |             |
| N/A   |             |
| SHEET 1 OF 1  |             |

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