

## Fire Rated 7/16 DIN Male to N Male Low PIM Cable Using TCOM-240-FR Coax With Times Microwave Components



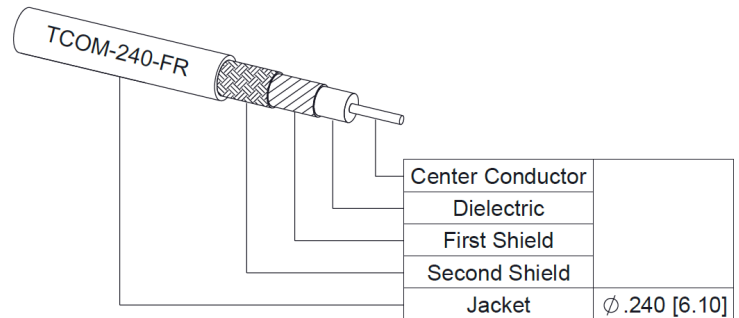
### PE3C10348

#### Configuration

- Connector 1: 7/16 DIN Male
- Connector 2: N Male
- Cable Type: TCOM-240-FR
- Coax Flex Type: Flexible

#### Features

- Max Frequency 6 GHz
- Shielding Effectivity > 100 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket
- 500 Mating Cycles



#### Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

#### Description

Pasternack's PE3C10348 7/16 DIN male to type N male cable using TCOM-240-FR coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack 7/16 DIN to type N cable assembly has a male to male gender configuration with 50 ohm flexible TCOM-240-FR coax. The PE3C10348 7/16 DIN male to type N male cable assembly operates to 6 GHz. Our low PIM design also offers excellent passive intermodulation performance. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 100 dB.

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      |             | 6       | GHz                   |
| VSWR                                       |         |             | 1.4:1   |                       |
| Velocity of Propagation                    |         | 84          |         | %                     |
| RF Shielding                               | 100     |             |         | dB                    |
| Group Delay                                |         | 1.21 [3.97] |         | ns/ft [ns/m]          |
| Passive Intermodulation                    |         | -155        |         | dBc                   |
| IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz |         |             |         |                       |
| Capacitance                                |         | 24.2 [79.4] |         | pF/ft [pF/m]          |
| Inductance                                 |         | 0.06 [0.2]  |         | uH/ft [uH/m]          |
| DC Resistance Inner Conductor              |         | 3.2 [10.5]  |         | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor              |         | 2.06 [6.76] |         | Ohms/1000ft [Ohms/Km] |

## Fire Rated 7/16 DIN Male to N Male Low PIM Cable Using TCOM-240-FR Coax With Times Microwave Components



### PE3C10348

#### Electrical Specifications

| Description  | Minimum | Typical | Maximum | Units |
|--------------|---------|---------|---------|-------|
| Jacket Spark |         |         | 5,000   | Vrms  |

#### Specifications by Frequency

| Part Number  | Length                   | Description           | F1    | F2    | F3    | F4    | F5    | Units | Weight (lbs) |
|--------------|--------------------------|-----------------------|-------|-------|-------|-------|-------|-------|--------------|
|              |                          | Frequency             | 250   | 500   | 1000  | 2500  | 6000  | MHz   |              |
| PE3C10348    | Custom Lengths Available | Insertion Loss (Typ.) | 0.037 | 0.052 | 0.076 | 0.123 | 0.197 | dB/ft |              |
|              |                          |                       | 0.13  | 0.18  | 0.25  | 0.41  | 0.65  | dB/m  |              |
| PE3C10348-12 | 12 inch                  | Insertion Loss (Typ.) | 0.53  | 0.55  | 0.57  | 0.62  | 0.69  | dB    | 0.265        |
| PE3C10348-24 | 24 inch                  | Insertion Loss (Typ.) | 0.57  | 0.6   | 0.65  | 0.74  | 0.89  | dB    | 0.31         |
| PE3C10348-36 | 36 inch                  | Insertion Loss (Typ.) | 0.61  | 0.65  | 0.72  | 0.86  | 1.09  | dB    | 0.355        |
| PE3C10348-48 | 48 inch                  | Insertion Loss (Typ.) | 0.64  | 0.7   | 0.8   | 0.99  | 1.28  | dB    | 0.4          |
| PE3C10348-60 | 60 inch                  | Insertion Loss (Typ.) | 0.68  | 0.75  | 0.87  | 1.11  | 1.48  | dB    | 0.445        |

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:    | 0.245 dB       |
| Loss due to Connector 2:    | 0.245 dB       |
| Base Weight:                | 0.265 pounds   |
| Additional Weight per Inch: | 0.00375 pounds |

#### Mechanical Specifications

##### Cable Assembly

|                |                     |
|----------------|---------------------|
| Width/Diameter | 0.5 in [12.7 mm]    |
| Weight         | 0.265 lbs [120.2 g] |

##### Cable

|                                      |                            |
|--------------------------------------|----------------------------|
| Cable Type                           | TCOM-240-FR                |
| Impedance                            | 50 Ohms                    |
| Inner Conductor Type                 | Solid                      |
| Inner Conductor Material and Plating | Copper                     |
| Dielectric Type                      | PE (F)                     |
| Number of Shields                    | 2                          |
| Shield Layer 1                       | Silver Plated Copper Braid |
| Shield Layer 2                       | Tinned Copper Braid        |
| Jacket Material                      | PE, Black                  |
| Jacket Diameter                      | 0.24 in [6.1 mm]           |
| One Time Minimum Bend Radius         | 0.75 in [19.05 mm]         |
| Repeated Minimum Bend Radius         | 2.5 in [63.5 mm]           |
| Bending Moment                       | 0.25 lbs-ft [0.34 N-m]     |
| Flat Plate Crush                     | 20 lbs/in [0.36 Kg/mm]     |
| Tensile Strength                     | 80 lbs [36.29 Kg]          |

## Fire Rated 7/16 DIN Male to N Male Low PIM Cable Using TCOM-240-FR Coax With Times Microwave Components



### PE3C10348

#### Connectors

| Description                       | Connector 1      | Connector 2      |
|-----------------------------------|------------------|------------------|
| Type                              | 7/16 DIN Male    | N Male           |
| Impedance                         | 50 Ohms          | 50 Ohms          |
| Configuration                     | Straight         | Straight         |
| Mating Cycles                     | 500              | 500              |
| 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 |

#### Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

#### Plotted and Other Data

Notes:

## Fire Rated 7/16 DIN Male to N Male Low PIM Cable Using TCOM-240-FR Coax With Times Microwave Components



### PE3C10348

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C10348**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C10348-12 = 12 inches long cable  
PE3C10348-100cm = 100 cm long cable

Fire Rated 7/16 DIN Male to N Male Low PIM Cable Using TCOM-240-FR Coax With Times Microwave Components 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.

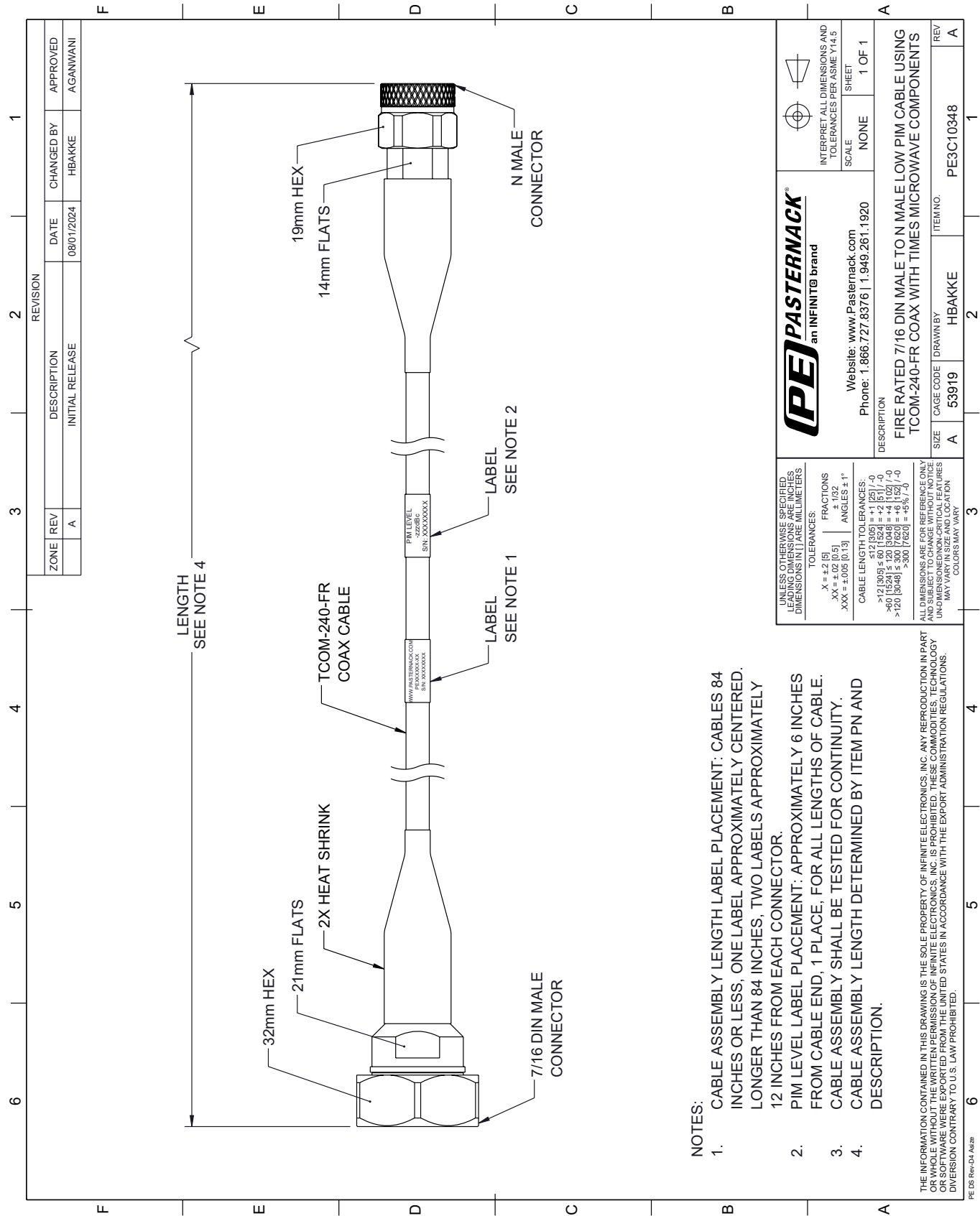
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated 7/16 DIN Male to N Male Low PIM Cable Using TCOM-240-FR Coax With Times Microwave Components PE3C10348](#)

URL: <https://www.pasternack.com/fire-rated-7-16-din-male-to-n-male-low-pim-cable-using-tcom-240-fr-pe3c10348-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3C10348 CAD Drawing

Fire Rated 7/16 DIN Male to N Male Low PIM Cable Using TCOM-240-FR Coax With Times Microwave Components



NOTES:

- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: CABLES 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
- PIM LEVEL LABEL PLACEMENT: APPROXIMATELY 6 INCHES FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.
- CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
- CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVISION CONTRARY TO U.S. LAW PROHIBITED.

PE DS Rev-D4 Adda