PASTERNACK
an INFINITE brand

# 2.4mm Male to 2.4mm Female Cable Using RG405 Coax

## TECHNICAL DATA SHEET PE3C7814

### Configuration

- Connector 1: 2.4mm Male
- Connector 2: 2.4mm Female
- Cable Type: RG405
- Coax Flex Type: Semi-Rigid

### Features

- Max Frequency 40 GHz
- Shielding Effectivity > -110 dB
- 69.5% Phase Velocity

### Applications

- General Purpose
- Laboratory Use

### Description

Pasternack's PE3C7814 2.4mm male to 2.4mm female cable using RG405 coax is part of our full line of RF components available for same-day shipping. Pasternack's semi-rigid RF cable assemblies are ideal for high performance applications and can be formed, using proper tooling, to the routing pattern required. This Pasternack 2.4mm to 2.4mm cable assembly has a male to female gender configuration with 50 ohm semi-rigid RG405 coax. The PE3C7814 2.4mm male to 2.4mm female cable assembly operates to 40 GHz.

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: 2.4mm Male to 2.4mm Female Cable Using RG405 Coax PE3C7814

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
**Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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## Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|---|---|---|---|---|
| Frequency Range | DC | | 40 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 69.5 | | % |
| RF Shielding | -110 | | | dB |
| Capacitance | | 29.4 [96.46] | | pF/ft [pF/m] |

## Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|---|---|---|---|---|---|---|
| Frequency | 1 | 2 | 4.5 | 9 | 20 | GHz |
| Insertion Loss (Typ.) | 0.22 | 0.27 | 0.4 | 0.63 | 1.2 | dB/ft |
| | 0.72 | 0.89 | 1.31 | 2.07 | 3.94 | dB/m |

Electrical Specification Notes:
Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

## Mechanical Specifications

### Cable Assembly

| | |
|---|---|
| Weight | 0.531 lbs [240.86 g] |

### Cable

| | |
|---|---|
| Cable Type | RG405 |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver |
| Dielectric Type | PTFE |
| Number of Shields | 1 |
| Outer Conductor Material and Plating | Copper |
| Repeated Minimum Bend Radius | 0.05 in [1.27 mm] |

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### Connectors

| Description | Connector 1 | Connector 2 |
|---|---|---|
| Type | 2.4mm Male Threaded | 2.4mm Female Threaded |
| Impedance | 50 Ohms | 50 Ohms |
| Mating Cycles | 500 | |
| Contact Material and Plating | Beryllium Copper, Gold over Nickel | Beryllium Copper, Gold over Nickel |
| Contact Plating Specification | MIL-G-45204 | 50 µin minimum |
| Dielectric Type | PPO | PEI |
| Body Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Body Plating Specification | ASTM-A380 | SAE-AMS-2700 |
| Coupling Nut Material and Plating | Passivated Stainless Steel | |
| Coupling Nut Plating Specification | ASTM-A380 | |
| Hex Size | 5/16 inch | |
| Torque | 8 in-lbs [0.9 Nm] | |

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

### Plotted and Other Data

Notes:

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## TECHNICAL DATA SHEET PE3C7814

### How to Order

Part Number Configuration: **PE3C7814 - xx uu**

- uu — Unit of Measure: cm = Centimeters; <blank> = Inches
- xx — Length
- PE3C7814 — Base Number

Example: PE3C7814-12 = 12 inches long cable
PE3C7814-100cm = 100 cm long cable

2.4mm Male to 2.4mm Female Cable Using RG405 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: 2.4mm Male to 2.4mm Female Cable Using RG405 Coax PE3C7814

URL: https://www.pasternack.com/2.4mm-male-to-2.4mm-female-cable-using-rg405-pe3c7814-p.aspx



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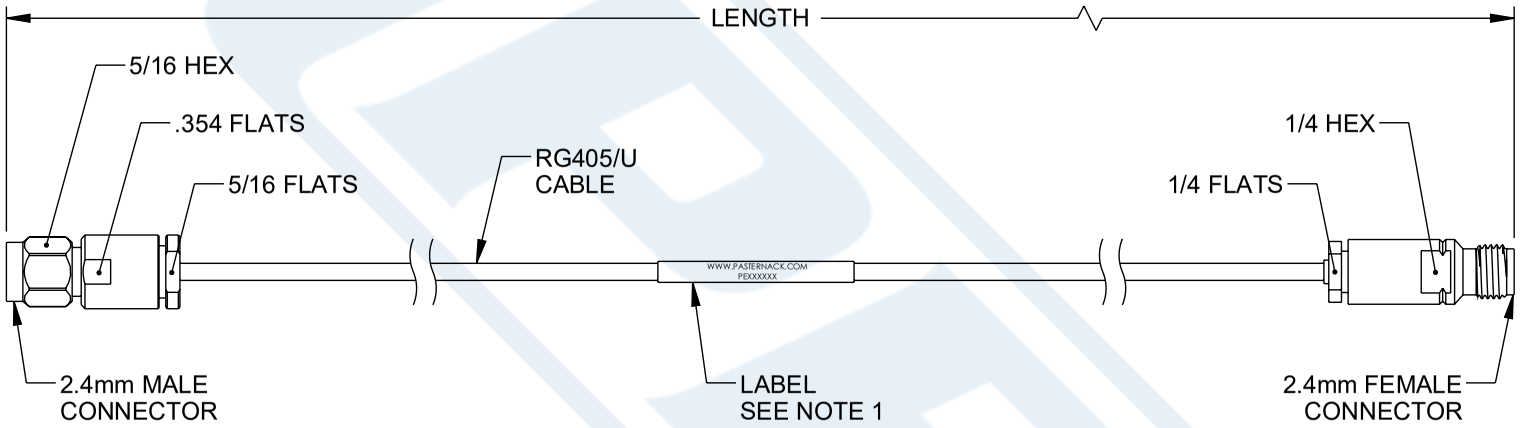
| REVISION | | | | | |
|---|---|---|---|---|---|
| ZONE | REV | DESCRIPTION | DATE | CHANGED BY | APPROVED |
| | B | ECO-13125 | 10/20/2023 | SREITER | SRAUTUS |




# PE3C7814 CAD Drawing

2.4mm Male to 2.4mm Female Cable Using RG405 Coax

NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCH OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCH, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

| | |
|---|---|
| .X = ±.2 [5] | FRACTIONS |
| .XX = ±.02 [0.5] | ± 1/32 |
| .XXX = ±.005 [0.13] | ANGLES ± 1° |

CABLE LENGTH TOLERANCES:

≤12 [305] = +1 [25] / -0
>12 [305] ≤ 60 [1524] = +2 [51] / -0
>60 [1524] ≤ 120 [3048] = +4 [102] / -0
>120 [3048] ≤ 300 [7620] = +6 [152] / -0
>300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.
UN-DIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION
COLORS MAY VARY

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Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

| SCALE | SHEET |
|---|---|
| NONE | 1 OF 1 |

DESCRIPTION: 2.4mm MALE TO 2.4mm FEMALE CABLE USING RG405 COAX

| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | REV |
|---|---|---|---|---|
| A | 53919 | SREITER | PE3C7814 | B |