



2.4mm Male to 2.4mm Female Cable Using RG405 Coax

RF Cable Assemblies Technical Data Sheet

PE3C7814

Configuration

- Connector 1: 2.4mm Male
- Connector 2: 2.4mm Female
- Cable Type: RG405

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](#)



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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	2.4mm Female
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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PE3C7814

How to Order

Part Number Configuration:

PE3C7814

- **xx**

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

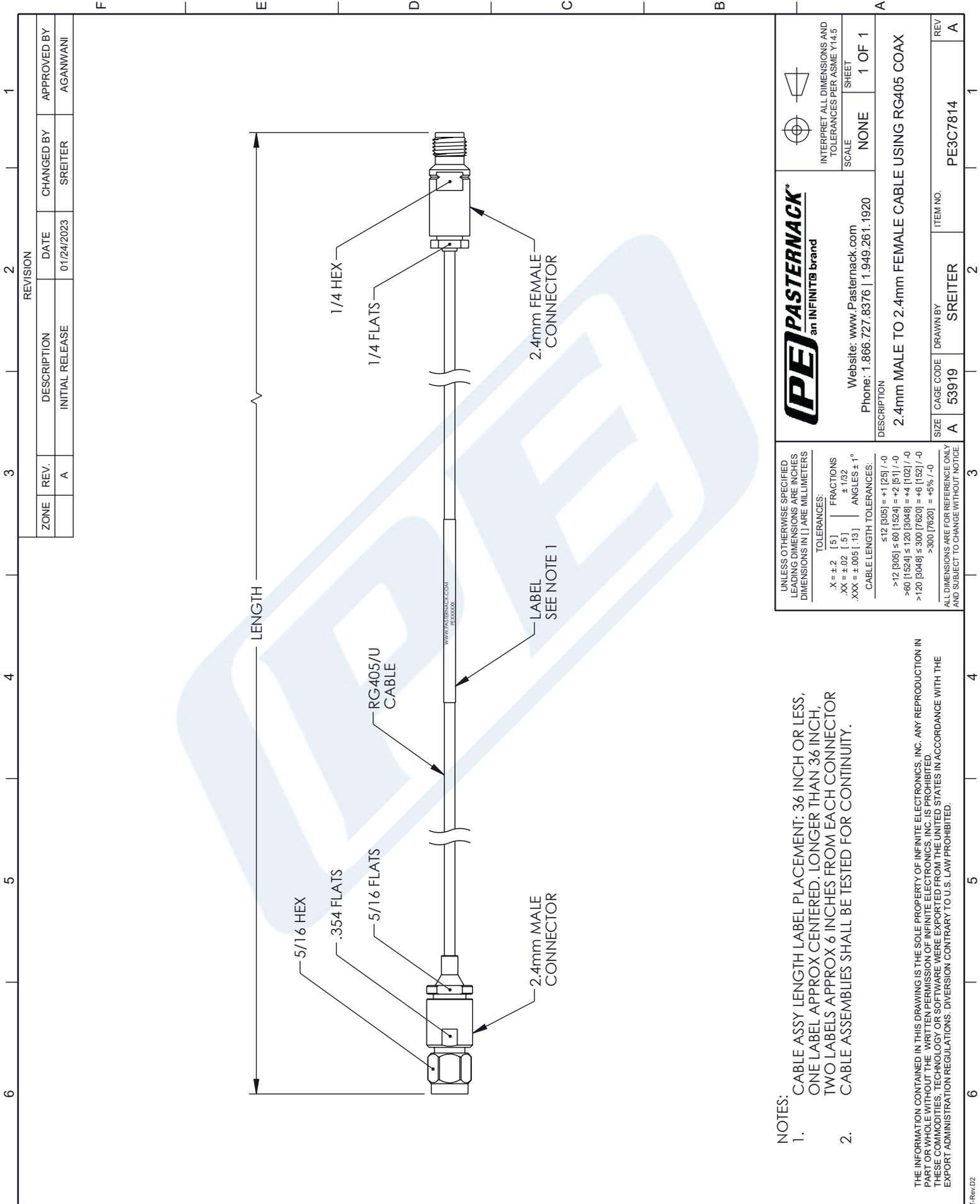
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.4mm Male to 2.4mm Female Cable Using RG405 Coax PE3C7814](https://www.pasternack.com/2.4mm-male-to-2.4mm-female-cable-using-rg405-pe3c7814-p.aspx)

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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.

PE3C7814 CAD Drawing

2.4mm Male to 2.4mm Female Cable Using RG405 Coax



ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	01/24/2023	SREITER	AGANWANI

PE PASTERNAK
an INFINITO brand

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

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

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE SHEET: 1 OF 1

ITEM NO. PE3C7814

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

TOLERANCES:
 .X = ±.2 [.5] FRACTIONS ±.1/32
 .XX = ±.02 [.5] ANGLES ± 1°
 .XXX = ±.005 [.13]

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.

NOTES:

- 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. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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