

2.4mm Male to 2.4mm Male Cable Using PE-SR405AL Coax



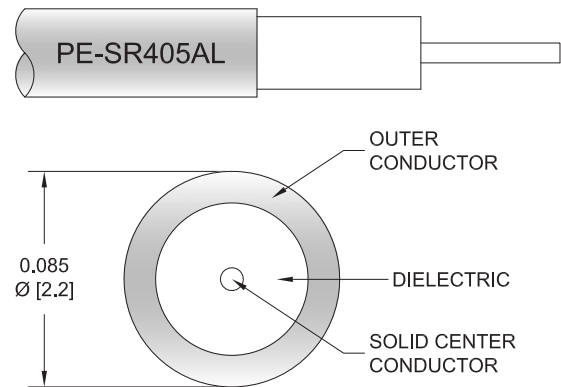
PE3C5640

Configuration

- Connector 1: 2.4mm Male
- Connector 2: 2.4mm Male
- Cable Type: PE-SR405AL
- Coax Flex Type: Semi-Rigid

Features

- Max Frequency 40 GHz
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C5640 2.4mm male to 2.4mm male cable using PE-SR405AL 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 male gender configuration with 50 ohm semi-rigid PE-SR405AL coax. The PE3C5640 2.4mm male to 2.4mm male 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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		40	
VSWR			1.4:1	
Dielectric Withstanding Voltage (AC)			1,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
		Frequency	2500	5000	10000	20000	MHz	
PE3C5640	Custom Lengths Available	Insertion Loss (Typ.)	0.32	0.48	0.81	1.31	dB/ft	
			1.05	1.58	2.66	4.3	dB/m	
PE3C5640-6	6 inch	Insertion Loss (Typ.)	0.29	0.42	0.66	1.02	dB	0.023
PE3C5640-12	12 inch	Insertion Loss (Typ.)	0.45	0.66	1.07	1.67	dB	0.03
PE3C5640-18	18 inch	Insertion Loss (Typ.)	0.61	0.9	1.47	2.33	dB	0.038
PE3C5640-24	24 inch	Insertion Loss (Typ.)	0.77	1.14	1.88	2.98	dB	0.045
PE3C5640-36	36 inch	Insertion Loss (Typ.)	1.09	1.62	2.69	4.29	dB	0.059

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: 0.04 x sqrt(fGHz) dB

Loss due to Connector 2: 0.04 x sqrt(fGHz) dB

Base Weight: 0.03 pounds

Additional Weight per Inch: 0.00117 pounds

Mechanical Specifications

Cable Assembly

Weight 0.03 lbs [13.61 g]

Cable

Cable Type PE-SR405AL
 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 1 Material and Plating Tinned Aluminum
 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 Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold over Nickel
Contact Plating Specification	50 µin minimum	50 µin minimum
Dielectric Type	PEI	PEI
Body Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold over Nickel
Body Plating Specification	50 µin minimum	50 µin minimum
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification	ASTM-A582	ASTM-A582
Hex Size	5/16 inch	5/16 inch
Torque	8 in-lbs 0.9 Nm	8 in-lbs 0.9 Nm

Environmental Specifications

Operating Range Temperature -55 to +125 deg C

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

Plotted and Other Data

Notes:

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PE3C5640

Typical Performance Data

How to Order

Part Number Configuration:

PE3C5640

- xx

uu

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

Length
Base Number

Example: PE3C5640-12 = 12 inches long cable
PE3C5640-100cm = 100 cm long cable

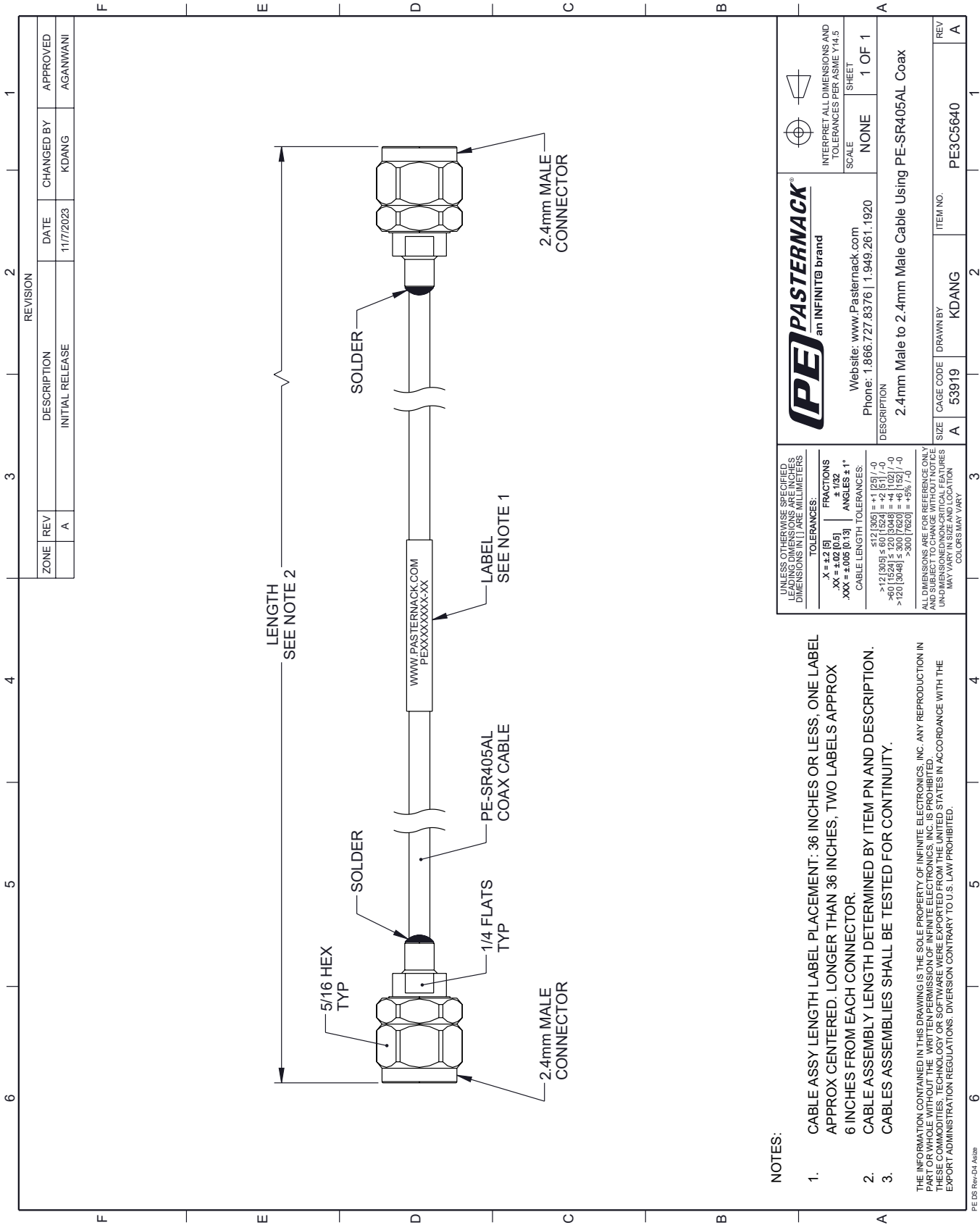
2.4mm Male to 2.4mm Male Cable Using PE-SR405AL Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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 Male Cable Using PE-SR405AL Coax PE3C5640](#)

URL: <https://www.pasternack.com/2.4mm-male-to-2.4mm-male-cable-using-pe-sr405al-pe3c5640-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.

PE3C5640 CAD Drawing
2.4mm Male to 2.4mm Male Cable Using PE-SR405AL Coax



NOTES:

- 1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
- 2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
- 3. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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PE DS Rev-Q4 Asize

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

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

CABLE LENGTH TOLERANCES:

≤ 12 [305]	±.12 [3.05]
> 12 [305] ≤ 60 [1524]	±.12 [3.05]
> 60 [1524] ≤ 120 [3048]	±.12 [3.05]
> 120 [3048]	±.12 [3.05]

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS. UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS. COLORS MAY VARY.

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
SHEET: 1 OF 1

DESCRIPTION: 2.4mm Male to 2.4mm Male Cable Using PE-SR405AL Coax

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	KDANG	PE3C5640	A