

1.85mm Male to 1.85mm Male Cable Using PE-SR405FL Coax



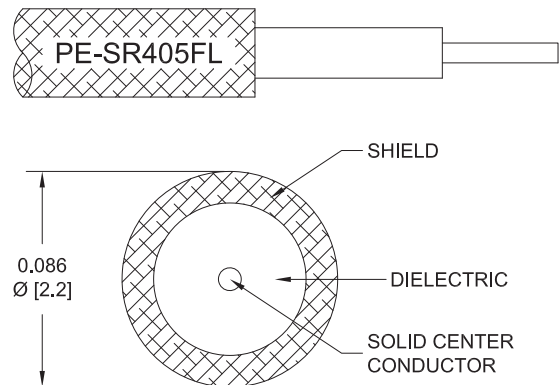
PE3C10743

Configuration

- Connector 1: 1.85mm Male
- Connector 2: 1.85mm Male
- Cable Type: PE-SR405FL
- Coax Flex Type: Formable

Features

- Max Frequency 20 GHz
- 69.5% Phase Velocity
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C10743 1.85mm male to 1.85mm male cable using PE-SR405FL coax is part of our full line of RF components available for same-day shipping. Pasternack's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. This Pasternack 1.85mm to 1.85mm cable assembly has a male to male gender configuration with 50 ohm formable PE-SR405FL coax. The PE3C10743 1.85mm male to 1.85mm male cable assembly operates to 20 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		20	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
Capacitance		29 [95.14]		pF/ft [pF/m]
DC Resistance Inner Conductor		65.7 [215.55]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		10.2 [33.46]		Ohms/1000ft [Ohms/Km]

Specifications by Frequency

1.85mm Male to 1.85mm Male Cable Using PE-SR405FL Coax



PE3C10743

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	1000	2000	4500	9000	20000	MHz	
PE3C10743	Custom Lengths Available	Insertion Loss (Typ.)	0.225	0.306	0.508	0.759	1.2	dB/ft	
			0.74	1.01	1.67	2.5	3.94	dB/m	
PE3C10743-6	6 In	Insertion Loss (Typ.)	0.2	0.27	0.43	0.62	0.96	dB	0.025
PE3C10743-9	9 In	Insertion Loss (Typ.)	0.25	0.35	0.56	0.81	1.26	dB	0.028
PE3C10743-12	12 In	Insertion Loss (Typ.)	0.31	0.42	0.68	1	1.56	dB	0.03
PE3C10743-18	18 In	Insertion Loss (Typ.)	0.42	0.58	0.94	1.38	2.16	dB	0.036
PE3C10743-24	24 In	Insertion Loss (Typ.)	0.53	0.73	1.19	1.76	2.76	dB	0.041

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*SQRT(FGHz) dB

Loss due to Connector 2: 0.04*SQRT(FGHz) dB

Base Weight: 0.03 pounds

Additional Weight per Inch: 0.00084 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter

0.5 in [12.7 mm]

Weight

0.03 lbs [13.61 g]

Cable

Cable Type

PE-SR405FL

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

Copper, Tin

Repeated Minimum Bend Radius

0.78 in [19.81 mm]

1.85mm Male to 1.85mm Male Cable Using PE-SR405FL Coax



PE3C10743

Connectors

Description	Connector 1	Connector 2
Type	1.85mm Male	1.85mm 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

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

Plotted and Other Data

Notes:

1.85mm Male to 1.85mm Male Cable Using PE-SR405FL Coax



PE3C10743

Typical Performance Data

How to Order

Part Number Configuration:

PE3C10743

- xx

uu

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

Length

Base Number

Example: PE3C10743-12 = 12 inches long cable
PE3C10743-100cm = 100 cm long cable

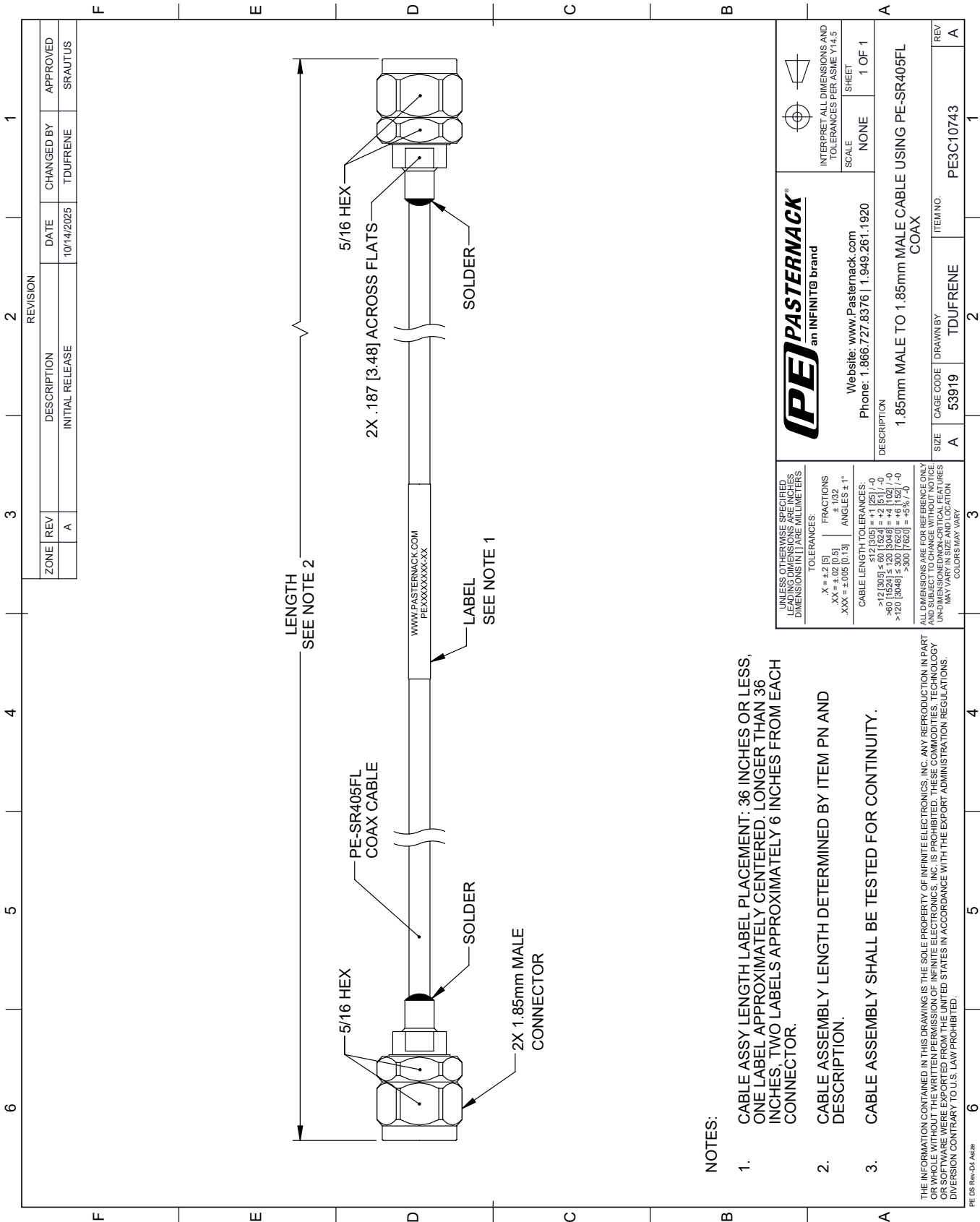
1.85mm Male to 1.85mm Male Cable Using PE-SR405FL Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Male to 1.85mm Male Cable Using PE-SR405FL Coax PE3C10743](https://www.pasternack.com/1.85mm-male-to-1.85mm-male-cable-using-pe-sr405fl-pe3c10743-p.aspx)

URL: <https://www.pasternack.com/1.85mm-male-to-1.85mm-male-cable-using-pe-sr405fl-pe3c10743-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.

PE3C10743 CAD Drawing
1.85mm Male to 1.85mm Male Cable Using PE-SR405FL Coax



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

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.