

2.4mm Male to 2.4mm Male Cable Using PE-SR405FLJ Coax



PE3W16148

Configuration

- Connector 1: 2.4mm Male
- Connector 2: 2.4mm Male
- Cable Type: PE-SR405FLJ
- Coax Flex Type: Formable

Features

- Max Frequency 20 GHz
- Shielding Effectivity > 100 dB
- 69.5% Phase Velocity
- FEP Jacket
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W16148 2.4mm male to 2.4mm male cable using PE-SR405FLJ 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 2.4mm to 2.4mm cable assembly has a male to male gender configuration with 50 ohm formable PE-SR405FLJ coax. The PE3W16148 2.4mm male to 2.4mm 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		%
RF Shielding	100			dB
Group Delay		1.43 [4.69]		ns/ft [ns/m]
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

2.4mm Male to 2.4mm Male Cable Using PE-SR405FLJ Coax



PE3W16148

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	1000	2000	4500	9000	20000	MHz	
PE3W16148	Custom Lengths Available	Insertion Loss (Typ.)	0.23	0.31	0.508	0.759	1.2	dB/ft	
			0.74	1.01	1.67	2.5	3.94	dB/m	
PE3W16148-6	6 inch	Insertion Loss (Typ.)	0.32	0.36	0.46	0.58	0.8	dB	1.107
PE3W16148-9	9 inch	Insertion Loss (Typ.)	0.37	0.43	0.59	0.77	1.1	dB	1.111
PE3W16148-12	12 inch	Insertion Loss (Typ.)	0.43	0.51	0.71	0.96	1.4	dB	1.114
PE3W16148-18	18 inch	Insertion Loss (Typ.)	0.54	0.66	0.97	1.34	2	dB	1.122
PE3W16148-24	24 inch	Insertion Loss (Typ.)	0.65	0.82	1.22	1.72	2.6	dB	1.129

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:	0.1 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	1.114 pounds
Additional Weight per Inch:	0.00117 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	1.114 lbs [505.3 g]

Cable

Cable Type	PE-SR405FLJ
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 Copper Composite Braid
Jacket Material	FEP, Black
Jacket Diameter	0.105 in [2.67 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	0.787 in [19.99 mm]

2.4mm Male to 2.4mm Male Cable Using PE-SR405FLJ Coax



PE3W16148

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	MIL-G-45204	MIL-G-45204
Dielectric Type	PPO	PPO
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Specification	ASTM-A380	ASTM-A380
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification	ASTM-A380	ASTM-A380
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 +100 deg C

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

Plotted and Other Data

Notes:

2.4mm Male to 2.4mm Male Cable Using PE-SR405FLJ Coax



PE3W16148

Typical Performance Data

How to Order

Part Number Configuration:

PE3W16148

- XX

uu

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

- Length

- Base Number

Example: PE3W16148-12 = 12 inches long cable
PE3W16148-100cm = 100 cm long cable

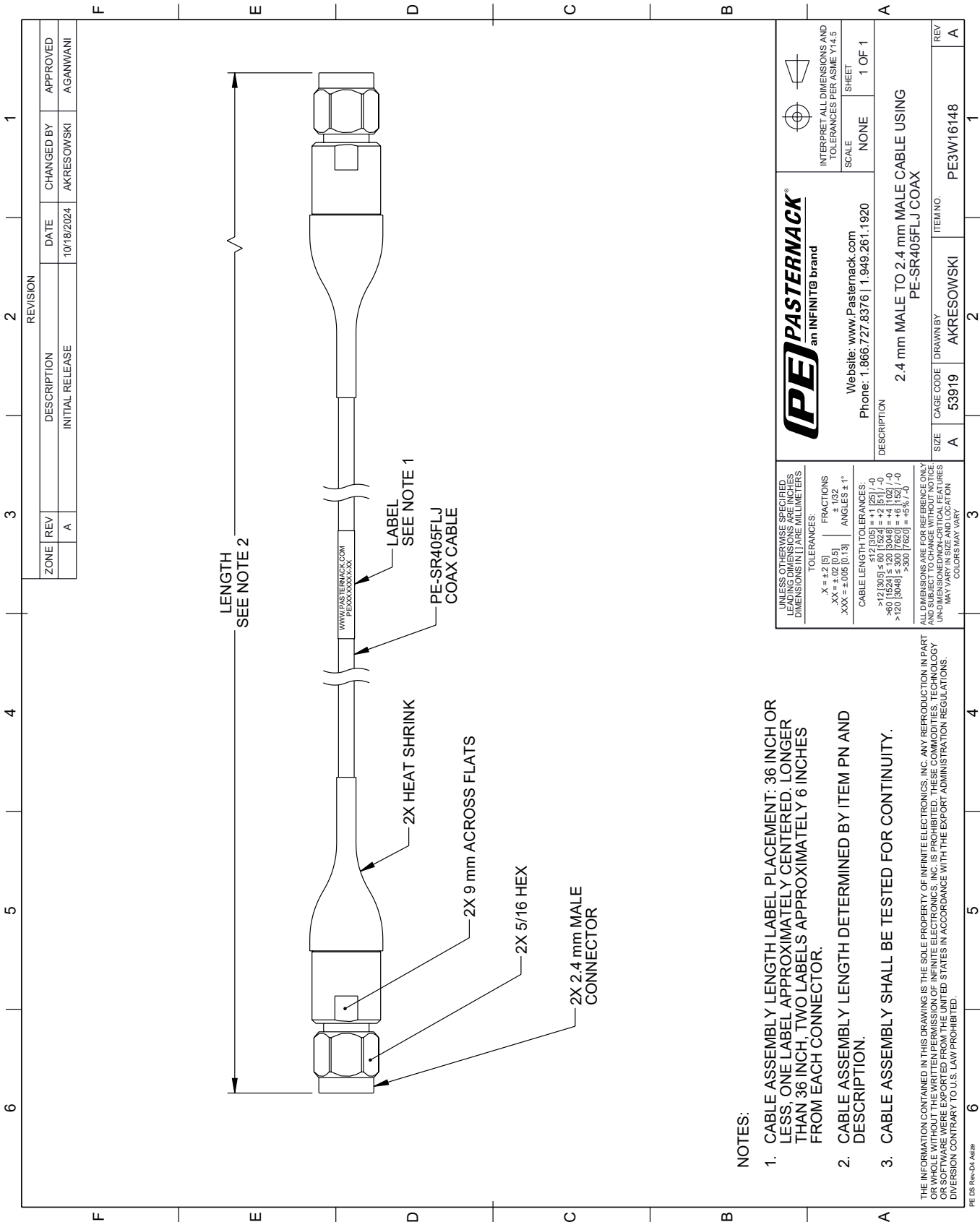
2.4mm Male to 2.4mm Male Cable Using PE-SR405FLJ Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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-SR405FLJ Coax PE3W16148](#)

URL: <https://www.pasternack.com/2.4mm-male-to-2.4mm-male-cable-using-pe-sr405flj-pe3w16148-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.

PE3W16148 CAD Drawing
2.4mm Male to 2.4mm Male Cable Using PE-SR405FLJ Coax



- NOTES:
- 1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCH OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 36 INCH, 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 WHEN EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS, DIVISION CONTRARY TO U.S. LAW PROHIBITED.

PE DS Rev-D4 Adda