



2.4mm Male to 1.85mm Male Cable 50 cm
Using PE-SR405FLJ Coax

RF Cable Assemblies Technical Data Sheet

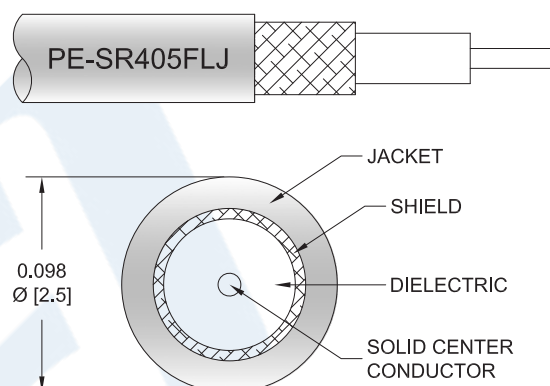
PE3W08014-50CM

Configuration

- Connector 1: 2.4mm Male
- Connector 2: 1.85mm Male
- Cable Type: PE-SR405FLJ

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 PE3W08014-50CM 2.4mm male to 1.85mm male 50 cm 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 1.85mm cable assembly has a male to male gender configuration with 50 ohm formable PE-SR405FLJ coax. The PE3W08014-50CM 2.4mm 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.

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 1.85mm Male Cable 50 cm Using PE-SR405FLJ Coax PE3W08014-50CM](#)



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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]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		10.2 [33.46]		Ω/1000ft [Ω/Km]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	20	GHz
Insertion Loss (Max.)	0.45	0.62	1.01	1.49	2.33	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss is estimated as 0.04*SQRT(FGHz) dB per 1.85mm male connector and 0.05*SQRT(FGHz) dB per 2.4mm male connector.

Mechanical Specifications

Cable Assembly

Length*	19.68 in [499.87 mm]
Diameter	0.312 in [7.92 mm]

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 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]

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Connectors

Description	Connector 1	Connector 2
Type	2.4mm Male	1.85mm Male
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold over Nickel
Contact Plating Specification	50 µin minimum	MIL-G-45204
Dielectric Type	PEI	
Outer Conductor Material and Plating	Beryllium Copper, Gold over Nickel	Stainless Steel, Gold over Nickel
Body Material and Plating	Beryllium Copper, Gold over Nickel	Stainless Steel, Gold over Nickel
Body Plating Specification	50 µin minimum	MIL-G-45204
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification	ASTM-A582	ASTM-A380
Hex Size	5/16 inch	1/4 inch
Torque	8 in-lbs [0.9 Nm]	8 in-lbs [0.9 Nm]
Seal Gasket Material	Silicone	

Environmental Specifications

Temperature

Operating Range -55 to +100 deg C

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

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3W08014

- **xx**

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

Example: PE3W08014-12 = 12 inches long cable
PE3W08014-100cm = 100 cm long cable

2.4mm Male to 1.85mm Male Cable 50 cm 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 1.85mm Male Cable 50 cm Using PE-SR405FLJ Coax PE3W08014-50CM](https://www.pasternack.com/2.4mm-male-1.85mm-male-pe-sr405flj-cable-assembly-pe3w08014-50cm-p.aspx)

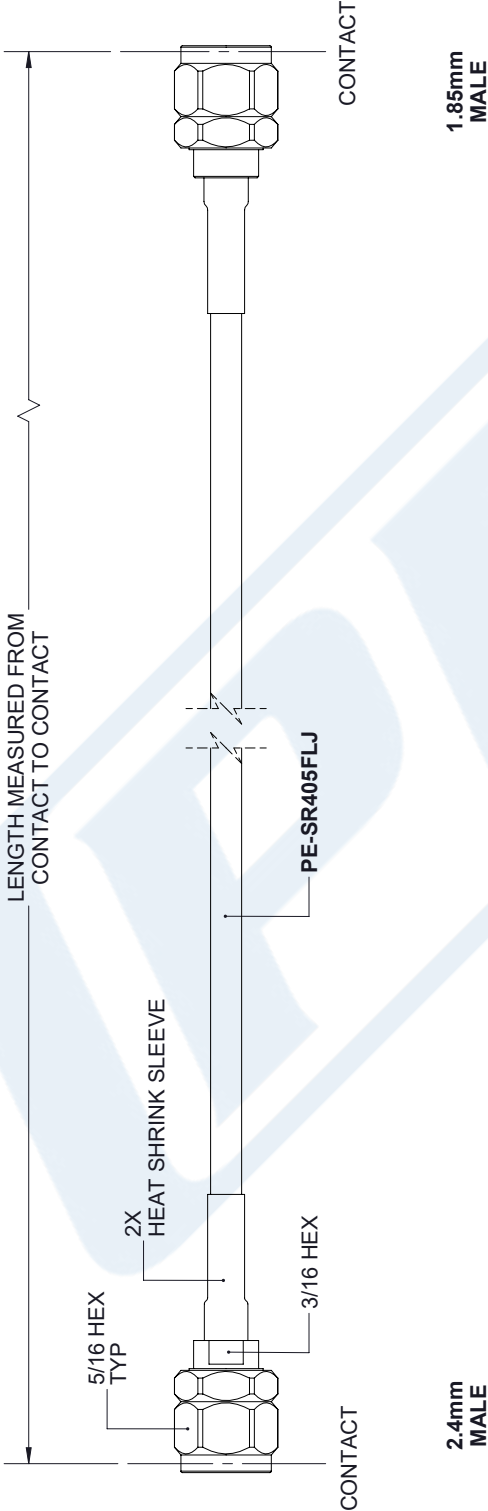
URL: <https://www.pasternack.com/2.4mm-male-1.85mm-male-pe-sr405flj-cable-assembly-pe3w08014-50cm-p.aspx>

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PE3W08014-50CM CAD Drawing

2.4mm Male to 1.85mm Male Cable 50 cm Using PE-SR405FLJ Coax

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	1/22/2020	SELLIS



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

TOLERANCES:
X = ± .2 [.08] FRACTIONS
.XX = ± .02 [.51] ± 1/32
.XXX = ± .005 [.13] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:
L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5% L / -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

PE PASTERNAK
an INFINITI® brand

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SHEET 1 OF 1

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	K.DANG	PE3W08014	A

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