



1.85mm Female to 2.4mm Male Adapter, Stainless Steel, Engineering Grade

RF Adapters Technical Data Sheet

PE91616

Configuration

- 1.85mm Female Connector 1
- 2.4mm Male Connector 2
- 50 Ohm
- Engineering Grade Design
- Straight Body Geometry

Features

- Max VSWR of 1.3:1 up to 50 GHz
- Gold Over Nickel Plated Beryllium Copper Contact

Applications

- Allows Connection Between Series
- General Purpose Test

Description

Pasternack's PE91616 1.85mm female to 2.4mm male adapter is part of our full line of RF components available for same-day shipping. The 1.85mm connector mates mechanically with commercially available 2.4mm connectors. Our 1.85mm to 2.4mm adapter has a female to male gender configuration built of durable stainless steel in an engineering grade design. PE91616 1.85mm female to 2.4mm male adapter operates to 50 GHz. The Pasternack RF adapter provides good VSWR of 1.3:1 maximum.

RF adapters are often used to enable connections between two connector types that would otherwise not mate. Certain adapter configurations can also be used to protect connectors on expensive equipment where the number of connect/disconnect cycles is high. An RF, microwave or millimeter wave adapter is connected to the equipment, and the commonly changed connection is made with the adapter which can be easily replaced when it wears out after high usage; such adapters are referred to as connector savers. Pasternack also offers bulkhead, panel mount, hermetically sealed, reverse polarity, and isolated ground adapter varieties to serve all of your RF, microwave and millimeter wave needs.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		50	GHz
VSWR			1.3:1	
Operating Voltage (AC)			150	Vrms
Dielectric Withstanding Voltage (AC)			500	Vrms
Insulation Resistance	5,000			MOhms
RF Leakage			100	dB

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 2.5	2.5 to 5	5 to 10	10 to 20	20 to 50	GHz
Insertion Loss, Max	0.095	0.134	0.19	0.268	0.424	dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Female to 2.4mm Male Adapter, Stainless Steel, Engineering Grade PE91616](#)



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Mechanical Specifications

Size

Length	0.96 in [24.50 mm]
Width	0.31 in [7.90 mm]
Height	0.31 in [7.90 mm]
Weight	0.12 lbs [54.43 g]

Description	Connector 1	Connector 2
Type	1.85mm Female	2.4mm Male
Polarity	Standard	Standard
Mating Cycles, Min	500	500
Mating Torque	7.08 to 9.74 in-lbs [0.80 to 1.10 Nm]	7.08 to 9.74 in-lbs 0.80 to 1.10 Nm
Contact Captivation Axial Force, Min	4.5 lbs [2.04 kg]	4.5 lbs [2.04 kg]
Coupling Proof Torque	15 in-lbs [1.7 Nm]	15 in-lbs [1.7 Nm]

Material Specifications

Description	Connector 1		Connector 2	
	Material	Plating	Material	Plating
Type	1.85mm Female		2.4mm Male	
Contact	Beryllium Copper	Gold Over Nickel	Beryllium Copper	Gold Over Nickel
Insulation	PPO		PPO	
Outer Conductor			Stainless Steel	Passivated
Body	Stainless Steel	Passivated	Stainless Steel	Passivated
Gasket	Silicone		Silicone	
Coupling Nut	Stainless Steel	Passivated	Stainless Steel	Passivated

Environmental Specifications

Temperature

Operating Range -65 to +165 °C

Humidity

MIL-STD-202, Method 206

Thermal Shock

MIL-STD-202, Method 107, Condition B

Salt Spray

MIL-STD-202, Method 101, Condition B

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

Plotted and Other Data

Notes:

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1.85mm Female to 2.4mm Male Adapter, Stainless Steel, Engineering Grade 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 Female to 2.4mm Male Adapter, Stainless Steel, Engineering Grade PE91616](https://www.pasternack.com/engineering-grade-1.85mm-female-to-2.4mm-male-adapter-pe91616-p.aspx)

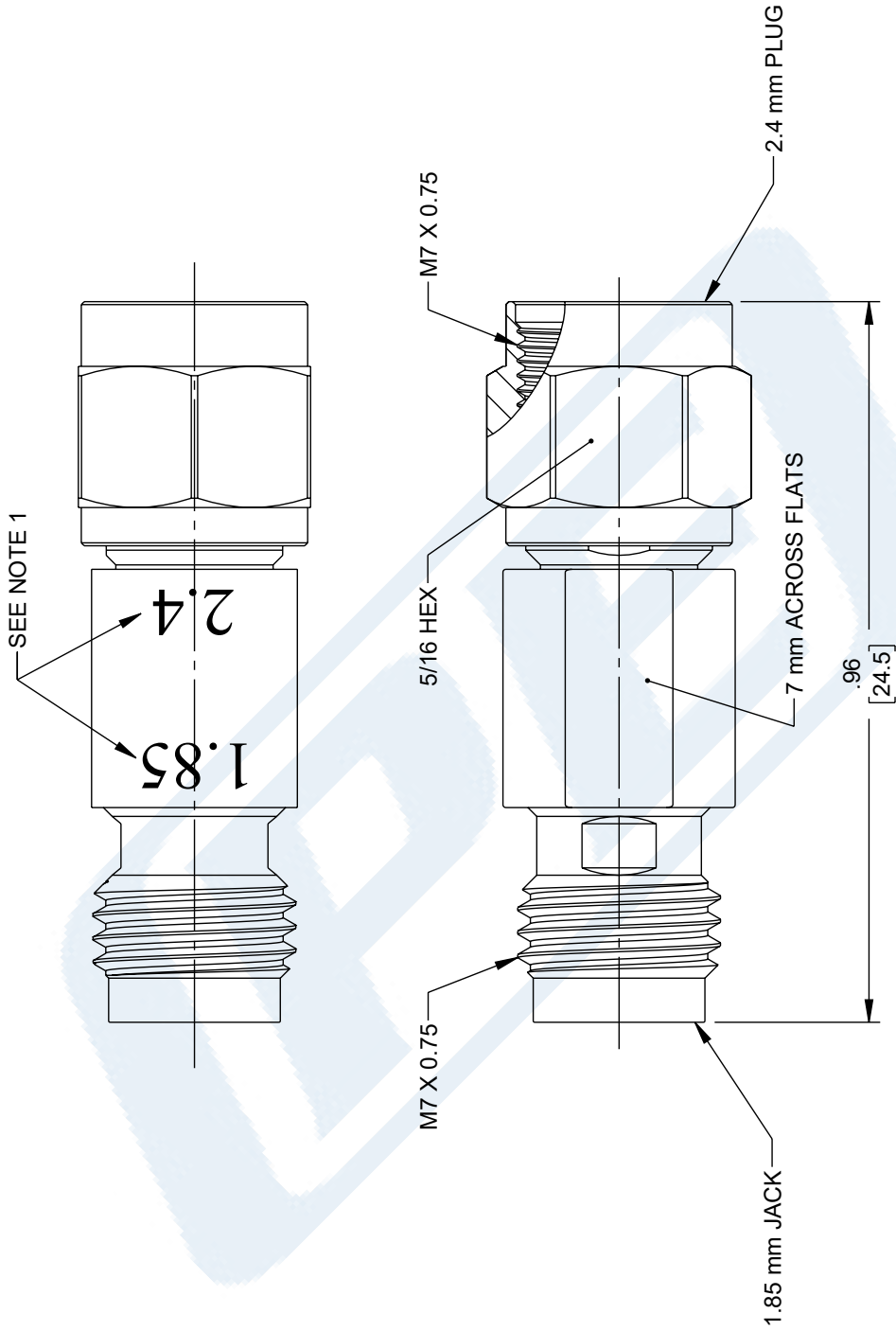
URL: <https://www.pasternack.com/engineering-grade-1.85mm-female-to-2.4mm-male-adapter-pe91616-p.aspx>

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.

PE91616 CAD Drawing

1.85mm Female to 2.4mm Male Adapter, Stainless Steel, Engineering Grade

REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	03/24/2023	DZINN	AGANWANI



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

TOLERANCES:

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

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

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 an INFINITIB brand

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

SCALE: NONE SHEET: 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

DESCRIPTION: RF ADAPTER, 1.85 mm JACK TO 2.4 mm PLUG 50GHZ VSWR1.3

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	DZINN	PE91616

REV A

NOTES:

1. ITEM IS MARKED WITH CONNECTOR TYPE APPROX WHERE SHOWN.

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