



5 dB Fixed Attenuator, 1.85mm Male to 1.85mm Female  
Passivated Stainless Steel Body Rated to 1 Watt Up to 65 GHz

**RF Fixed Attenuators Technical Data Sheet**

**PE7403-5**

**Features**

- DC to 65 GHz Frequency Range
- Attenuation 5±1.5 dB
- Max Power 1 Watt (CW)
- VSWR < 1.65:1

**Applications**

- Instrumentation
- Precision measurements
- Prototyping and characterization
- Production systems

**Description**

Pasternack carries a wide range of fixed attenuators with a broad selection of attenuation levels, frequency ranges, and power dissipation ranges. RF microwave attenuators (also known as RF pads) lower the amplitude of a signal (attenuate) a known amount and can be used in a wide variety of applications. These attenuator pads are used when a signal needs to be reduced to protect measurement equipment or other circuitry, to extend the range of power meters and amplifiers, and to impedance match circuits by reducing the VSWR seen by adjacent components. RF attenuators can prevent signal overload in amplifiers, receivers and detectors, adjusting the signal level to a range that is optimal.

Few RF components are as commonly used as fixed coaxial attenuators, and Pasternack carries one of the largest in-stock varieties and ships them same day. The 5 dB Fixed Attenuator PE7403-5 is rated to 1 Watt and operates from DC to 65 GHz. The versatile coaxial package uses 1.85mm male to 1.85mm female connectors and is also REACH and RoHS compliant.

**Electrical Specifications**

| Description   | Minimum | Typical | Maximum | Units |
|---|---------|---------|---------|-------|
| Frequency Range                                       | DC      |         | 65      | GHz   |
| Impedance   |         | 50      |         | Ohms  |
| Nominal Attenuation                                   |         | 5       |         | dB    |
| VSWR  |         |         | 1.65:1  |       |
| Input Power, CW<br>derated linearly to 0.1W at +100°C |         |         | 1       | Watt  |

**Specifications by Frequency**

| Description               | F1         | F2         | F3       | F4       | F5 | Units |
|---------------------------|------------|------------|----------|----------|----|-------|
| Range                     | DC to 26.5 | 26.5 to 40 | 40 to 60 | 60 to 65 |    | GHz   |
| VSWR, Max                 | 1.35:1     | 1.55:1     | 1.65:1   | 1.65:1   |    |       |
| Attenuation Accuracy, Typ | 0.75       | 1          | 1.5      | 1.5      |    | dB    |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [5 dB Fixed Attenuator, 1.85mm Male to 1.85mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 65 GHz PE7403-5](#)



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### Mechanical Specifications

#### Size

|                           |                            |
|---------------------------|----------------------------|
| Length                    | 0.88 in [22.35 mm]         |
| Width/Diameter            | 0.312 in [7.92 mm]         |
| Weight                    | 0.015 lbs [6.8 g]          |
| Body Material and Plating | Passivated Stainless Steel |

#### Configuration

|               |                      |
|---------------|----------------------|
| Design        | Fixed                |
| Package Style | Connectorized Module |

#### Connectors

| Description                       | Connector 1                | Connector 2                |
|-----------------------------------|----------------------------|----------------------------|
| Type                              | 1.85mm Male                | 1.85mm Female              |
| Contact Material and Plating      | Beryllium Copper, Gold     | Beryllium Copper, Gold     |
| Contact Plating Specification     | MIL-PRF-39012              | MIL-PRF-39012              |
| Dielectric Type                   | PTFE                       | PTFE                       |
| Coupling Nut Material and Plating | Passivated Stainless Steel |                            |
| Body Material and Plating         | Passivated Stainless Steel | Passivated Stainless Steel |

#### Mechanical Specification Notes:

The connectors use high temperature plastic bead dielectric.

### Environmental Specifications

#### Temperature

|                 |                   |
|-----------------|-------------------|
| Operating Range | -55 to +100 deg C |
| Storage Range   | -55 to +100 deg C |

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

### Plotted and Other Data

Notes:

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5 dB Fixed Attenuator, 1.85mm Male to 1.85mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 65 GHz 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.

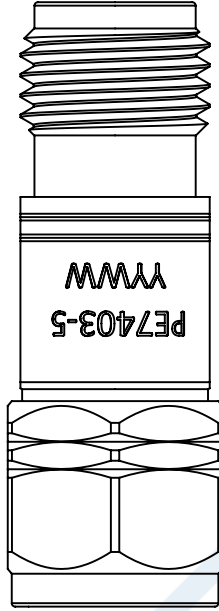
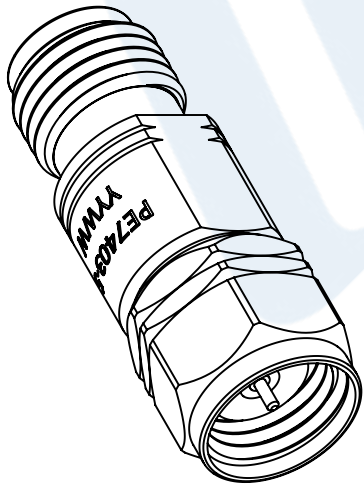
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [5 dB Fixed Attenuator, 1.85mm Male to 1.85mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 65 GHz PE7403-5](https://www.pasternack.com/5db-fixed-1.85mm-male-1.85mm-female-1-watt-attenuator-pe7403-5-p.aspx)

URL: <https://www.pasternack.com/5db-fixed-1.85mm-male-1.85mm-female-1-watt-attenuator-pe7403-5-p.aspx>

# PE7403-5 CAD Drawing

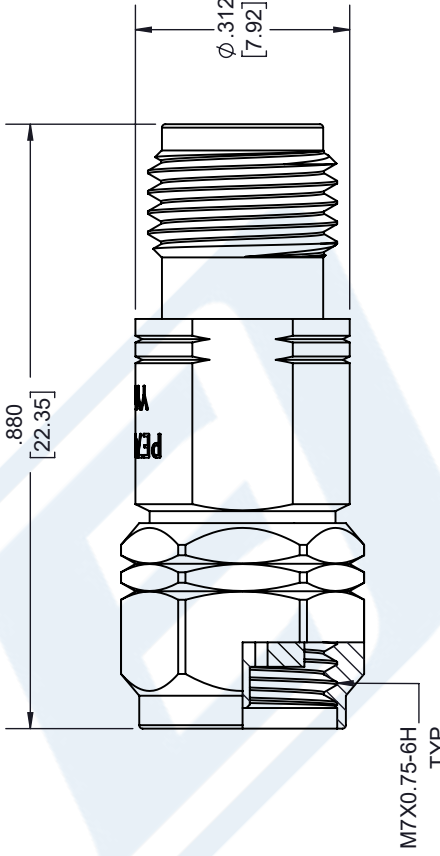
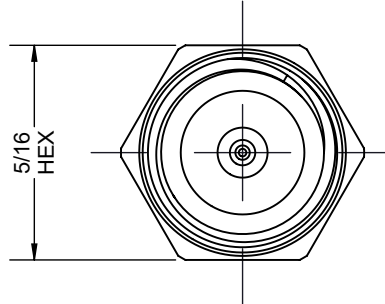
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| REVISIONS |                              |          |          |
|-----------|------------------------------|----------|----------|
| REV.      | DESCRIPTION                  | DATE     | APPROVED |
| B         | PE7403-10 SA6510-10 20220429 | 6/7/2022 | S. PONG  |



1.85mm MALE

1.85mm FEMALE



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

TOLERANCES:  
 .X = ±.2 [5.08]      FRACTIONS ± 1/32  
 .XX = ±.02 [ .51]      ANGLES ± 1°  
 .XXX = ±.005 [ .13]

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% / -0

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

**PE PASTERNAK**  
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THIRD-ANGLE PROJECTION  

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 SHEET 1 OF 1  
 SCALE N/A

SIZE [CAGE CODE] DRAWN BY ITEM NO.  
 A 53919 K.DANG PE7403-5  
 REV B