



Adjustable Phase Trimmer, DC to 18 GHz, with an Adjustable Phase of 15 Deg. Per GHz and SMA Connectors, Brass Body

## Phase Shifters and Trimmers Technical Data Sheet

**PE8205**

### Features

- Phase Adjustment: 15 Deg/GHz
- Frequency Range from DC to 18 GHz
- SMA Connectorized Design
- Insertion Loss: 0.5 dB Max
- Max VSWR 1.4:1
- Max Power Rating: 80 Watts (CW)

### Applications

- Test & Measurements
- Radar Development
- Military Communications Systems
- Phase Array Antenna System
- Satellite Communications

### Description

Pasternack's PE8205 is a phase trimmer that has phase adjustment range of 15 degrees per GHz with a frequency range from DC to 18 GHz. With SMA male to SMA female connectors, this RF phase trimmer design is tried and true technology that offers exceptional RF performance characteristics that include a maximum VSWR of 1.4:1. Phase trimmers are part of Pasternack's comprehensive RF passive product offerings which are available in stock and ready for same-day shipment.

### Electrical Specifications (Values at +25° C, Sea Level)

| Description      | Minimum | Typical | Maximum | Units   |
|------------------|---------|---------|---------|---------|
| Frequency Range  | DC      |         | 18      | GHz     |
| Impedance        |         | 50      |         | Ohms    |
| Phase Adjustment |         | 15      |         | Deg/GHz |
| Input VSWR       |         |         | 1.4:1   |         |
| Insertion Loss   |         |         | 0.5     | dB      |
| Input Power, CW  |         |         | 80      | dBm     |

### Specifications by Frequency

| Description     | F1      | F2      | F3       | F4 | F5 | Units |
|-----------------|---------|---------|----------|----|----|-------|
| Frequency Range | DC to 6 | 6 to 12 | 12 to 18 |    |    | GHz   |
| VSWR, Max       | 1.15:1  | 1.25:1  | 1.4:1    |    |    |       |

### Mechanical Specifications

#### Size

|                           |                            |
|---------------------------|----------------------------|
| Length                    | 2.598 in [65.99 mm]        |
| Width/Diameter            | 0.5 in [12.7 mm]           |
| Height                    | 0.5 in [12.7 mm]           |
| Weight                    | 0.08 lbs [36.29 g]         |
| Body Material and Plating | Passivated Stainless Steel |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Adjustable Phase Trimmer, DC to 18 GHz, with an Adjustable Phase of 15 Deg. Per GHz and SMA Connectors, Brass Body PE8205](#)

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### Configuration

|                                          |                  |
|------------------------------------------|------------------|
| Input Connector                          | SMA Female       |
| Input Connector Center Contact Material  | Beryllium Copper |
| Input Connector Center Contact Plating   | Gold             |
| Output Connector                         | SMA Male         |
| Output Connector Center Contact Material | Beryllium Copper |
| Output Connector Center Contact Plating  | Gold             |

### Environmental Specifications

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

### Plotted and Other Data

Notes:

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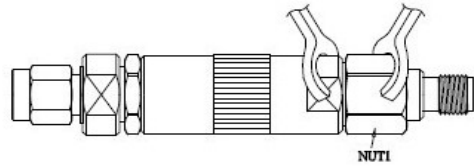
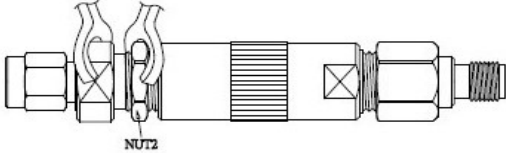
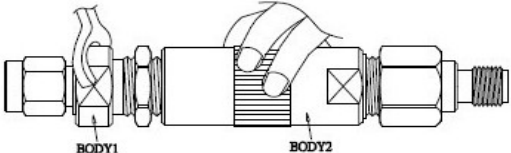
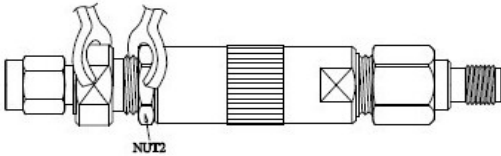
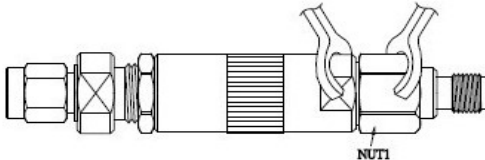


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PE8205

Sequence Diagram

Phase Trimmer Instructions

| Diagram                                                                             | Phase Trimmer Instructions                                                                                                                            |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | Step 1: Loosen NUT1 before adjusting Phase. Use Spanner size 11mm.                                                                                    |
|   | Step 2: Loosen NUT2 before adjusting Phase. Use Spanner size 11mm.                                                                                    |
|  | Step 3: Adjust to the required phase: Keep BODY1 in a fixed position and adjust phase by manually turning BODY2.                                      |
|  | Step 4: Tighten NUT2 after adjusting phase. Use Spanner size 11mm.                                                                                    |
|  | Step 5: Tighten NUT1 after adjusting phase. Use Spanner size 11mm.<br><br>Note: After tightening NUT1 the SMA Female should be fixed (and not rotate) |

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Adjustable Phase Trimmer, DC to 18 GHz, with an Adjustable Phase of 15 Deg. Per GHz and SMA Connectors, Brass Body 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.

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# PE8205 CAD Drawing

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