



## 20 dB Fixed Attenuator, SMA Female To TNC Male Directional Rated To 100 Watts Up To 6 GHz

### TECHNICAL DATA SHEET

PE7233-20

#### 20 dB Fixed Attenuator, SMA Female To TNC Male Directional Rated To 100 Watts Up To 6 GHz

Pasternack Enterprises line of 100W Attenuators operate from DC to 6 GHz, and are available in 42 different 7/16 DIN, N, SMA and TNC in-series and between-series connector combinations. Our 100W Attenuators are manufactured with Passivated Stainless Steel SMA, TNC and N connectors, and Silver Plated Brass 7/16 DIN connectors. Pasternack 100W Attenuators come in 3 dB, 6 dB, 10 dB, 20 dB, 30 dB, 40 dB, 60 dB values and will operate from -55 to +125 degrees C. Additional connector combinations are available beyond the 42 standard designs, upon request.

- 100W average power and 2,000W peak power handling capability
- Operate to 6 GHz
- Temperature range of -55 to +125 degrees C
- 42 in-series and between series combinations
- 7/16 DIN, SMA, N, TNC Male and Female connectors are available
- Other connector combinations available upon request

#### Configuration

|                           |                                   |
|---------------------------|-----------------------------------|
| Design                    | Fixed, Directional Attenuator     |
| Connector 1               | SMA Female                        |
| Connector 2               | TNC Male                          |
| Body Material and Plating | Aluminum Heatsink, Black Anodized |

#### Electrical Specifications

|                            |         |
|----------------------------|---------|
| Frequency Range, GHz       | DC to 6 |
| Impedance, Ohms            | 50      |
| Attenuation Value, dB      | 20      |
| Maximum Input Power, Watts | 100     |
| Maximum VSWR               | 1.45:1  |

#### Frequency 1

|                          |         |
|--------------------------|---------|
| Range, GHz               | DC to 2 |
| VSWR                     | 1.2:1   |
| Attenuation Accuracy, dB | ± 1     |

#### Frequency 2

|                          |        |
|--------------------------|--------|
| Range, GHz               | 2 to 4 |
| VSWR                     | 1.35:1 |
| Attenuation Accuracy, dB | ± 1    |

#### Frequency 3

|                          |        |
|--------------------------|--------|
| Range, GHz               | 4 to 6 |
| VSWR                     | 1.45:1 |
| Attenuation Accuracy, dB | ± 1.25 |

#### Mechanical Specifications

##### Temperature

|                        |             |
|------------------------|-------------|
| Operating Range, deg C | -55 to +125 |
|------------------------|-------------|

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [20 dB Fixed Attenuator, SMA Female To TNC Male Directional Rated To 100 Watts Up To 6 GHz PE7233-20](#)

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.



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**Size**

|                  |              |
|------------------|--------------|
| Length, in [mm]  | 4.9 [124.46] |
| Width, in [mm]   | 3.8 [96.52]  |
| Height, in [mm]  | 2.7 [68.58]  |
| Weight, lbs [Kg] | 3 [1.36]     |

**Connector 1**

|                              |                             |
|------------------------------|-----------------------------|
| Type                         | SMA Female                  |
| Contact Material and Plating | Beryllium Copper, Gold      |
| Body Material and Plating    | Stainless Steel, Passivated |

**Connector 2**

|                                   |                             |
|-----------------------------------|-----------------------------|
| Type                              | TNC Male                    |
| Contact Material and Plating      | Beryllium Copper, Gold      |
| Coupling Nut Material and Plating | Stainless Steel, Passivated |
| Body Material and Plating         | Stainless Steel, Passivated |

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

|                |     |
|----------------|-----|
| RoHS Compliant | Yes |
|----------------|-----|

**Plotted and Other Data**

|        |                            |
|--------|----------------------------|
| Notes: | Values at 25 °C, sea level |
|--------|----------------------------|

URL: <http://www.pasternack.com/20db-fixed-sma-female-tnc-male-100-watts-attenuator-pe7233-20-p.aspx>

20 dB Fixed Attenuator, SMA Female To TNC Male Directional Rated To 100 Watts Up To 6 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

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# PE7233-20 CAD Drawing

20 dB Fixed Attenuator, SMA Female To TNC Male

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| xx  | Input Connector             | Output Connector |
|-----|-----------------------------|------------------|
| 01  | 7/16 Female                 | 7/16 Male        |
| 02  | N Female                    | 7/16 Male        |
| 03  | 7/16 Male                   | 7/16 Female      |
| 04  | 7/16 Female                 | 7/16 Female      |
| 05  | N Male                      | 7/16 Female      |
| 06  | N Female                    | 7/16 Female      |
| 07  | 7/16 Female                 | N Male           |
| 08  | N Female                    | N Male           |
| 09  | SMA Female                  | N Male           |
| 10  | TNC Female                  | N Male           |
| 11  | 7/16 Male                   | N Female         |
| 12  | 7/16 Female                 | N Female         |
| 13  | N Male                      | N Female         |
| 14  | N Female                    | N Female         |
| 15  | SMA Male                    | N Female         |
| 16  | SMA Female                  | N Female         |
| 17  | TNC Male                    | N Female         |
| 18  | TNC Female                  | N Female         |
| 19  | 7/16 Female                 | SMA Male         |
| 20  | N Female                    | SMA Male         |
| 21  | SMA Female                  | SMA Male         |
| 22  | TNC Female                  | SMA Male         |
| 23  | 7/16 Male                   | SMA Female       |
| 24  | 7/16 Female                 | SMA Female       |
| 25  | N Male                      | SMA Female       |
| 26  | N Female                    | SMA Female       |
| 27  | SMA Male                    | SMA Female       |
| 28  | SMA Female                  | SMA Female       |
| 29  | TNC Male                    | SMA Female       |
| 30  | TNC Female                  | SMA Female       |
| 31  | 7/16 Female                 | TNC Male         |
| 32  | N Female                    | TNC Male         |
| 33  | SMA Female                  | TNC Male         |
| 34  | TNC Female                  | TNC Male         |
| 35  | 7/16 Male                   | TNC Female       |
| 36  | 7/16 Female                 | TNC Female       |
| 37  | N Male                      | TNC Female       |
| 38  | N Female                    | TNC Female       |
| 39  | SMA Male                    | TNC Female       |
| 40  | SMA Female                  | TNC Female       |
| 41  | TNC Male                    | TNC Female       |
| 42  | TNC Female                  | TNC Female       |
| -yy | Indicates Attenuation Level |                  |

| Table of Information |                |
|----------------------|----------------|
| Connector Type       | DIM "A" (REF.) |
| SMA Male             | 0.68           |
| SMA Female           | 0.54           |
| TNC Male             | 0.98           |
| TNC Female           | 0.94           |
| N Female             | 0.95           |
| N Male               | 0.98           |
| 7/16 Male            | 1.12           |
| 7/16 Female          | 1.16           |



DWG TITLE

**PE72xx-yy**

NOTES:  
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
 3. DIMENSIONS ARE IN INCHES [mm].

FSCM NO. 53919

CAD FILE 091412

SCALE N/A

SIZE A

2233



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