



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

### TECHNICAL DATA SHEET

PE7209-20

#### 20 dB Fixed Attenuator, SMA Female To N 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	N 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
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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 N Male Directional Rated To 100 Watts Up To 6 GHz PE7209-20](#)

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	N 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
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**Plotted and Other Data**

Notes:	Values at 25 °C, sea level
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URL: <http://www.pasternack.com/20db-fixed-sma-female-n-male-100-watts-attenuator-pe7209-20-p.aspx>

20 dB Fixed Attenuator, SMA Female To N 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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# PE7209-20 CAD Drawing

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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	



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].

DWG TITLE  
**PE72xx-yy**

**PE PASTERNAK®**  
 Pasternack Enterprises, Inc.  
 P.O. Box 16759 | Irvine | CA | 92623  
 Phone: (949) 261-1920 | Fax: (949) 261-7451  
 Website: www.pasternack.com | E-Mail: sales@pasternack.com

FSCM NO. 53919  
 CAD FILE 091412  
 SCALE N/A  
 SIZE A  
 2233