



0 to 20 dB Voltage Variable Attenuator, PIN Diode,  
50 MHz to 2.2 GHz, Rated to 10 dBm, SMA

TECHNICAL DATA SHEET

PE70A1031

The PE70A1031 is a 20 dB Pin Diode Voltage Variable Attenuator with an operating frequency range from 50 MHz to 2200 MHz. The RF Input/Output Connectors are SMA Female. The attenuator uses a 5 Vdc supply and the voltage control that is used to select the attenuation state and a single 0 to +10 VDC bias that allows the operation at frequencies down to DC. The connectorized package has SMA connectors and has an operating temperature range of -20°C to +75°C.

**Features**

- Voltage Variable control of 20 dB Attenuator
- 50 MHz to 2200 MHz frequency range
- 20 dB Attenuation Range
- Insertion Loss 3 dB Typ
- SMA Female Connectors

**Applications**

- Electronic Warfare
- Electronic Countermeasures
- Microwave Radio
- VSAT
- Radar
- Fiber Optic
- Space Systems
- Test Instrumentation
- Telecom Infrastructure

**Electrical Specifications** (Values at 25°C, sea level)

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.05		2.2	GHz
Mean Attenuation Range	0		20	dB
Insertion Loss			3	dB
VSWR			1.7:1	
Power Rating			10	dBm
Analog Control		-2		dB/Volt
Control	0		10	Volts
DC Power Supply to 5 VDC			2	mA

**Mechanical Specifications**

**Size**

- Input Connector SMA Female
- Output Connector SMA Female

**Environmental Specifications**

**Temperature**

- Operating Range -20 to +75 deg C
- Storage Range -40 to +85 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [0 to 20 dB Voltage Variable Attenuator, PIN Diode, 50 MHz to 2.2 GHz, Rated to 10 dBm, SMA PE70A1031](#)



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

### Plotted and Other Data

Notes:

- Values at +25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

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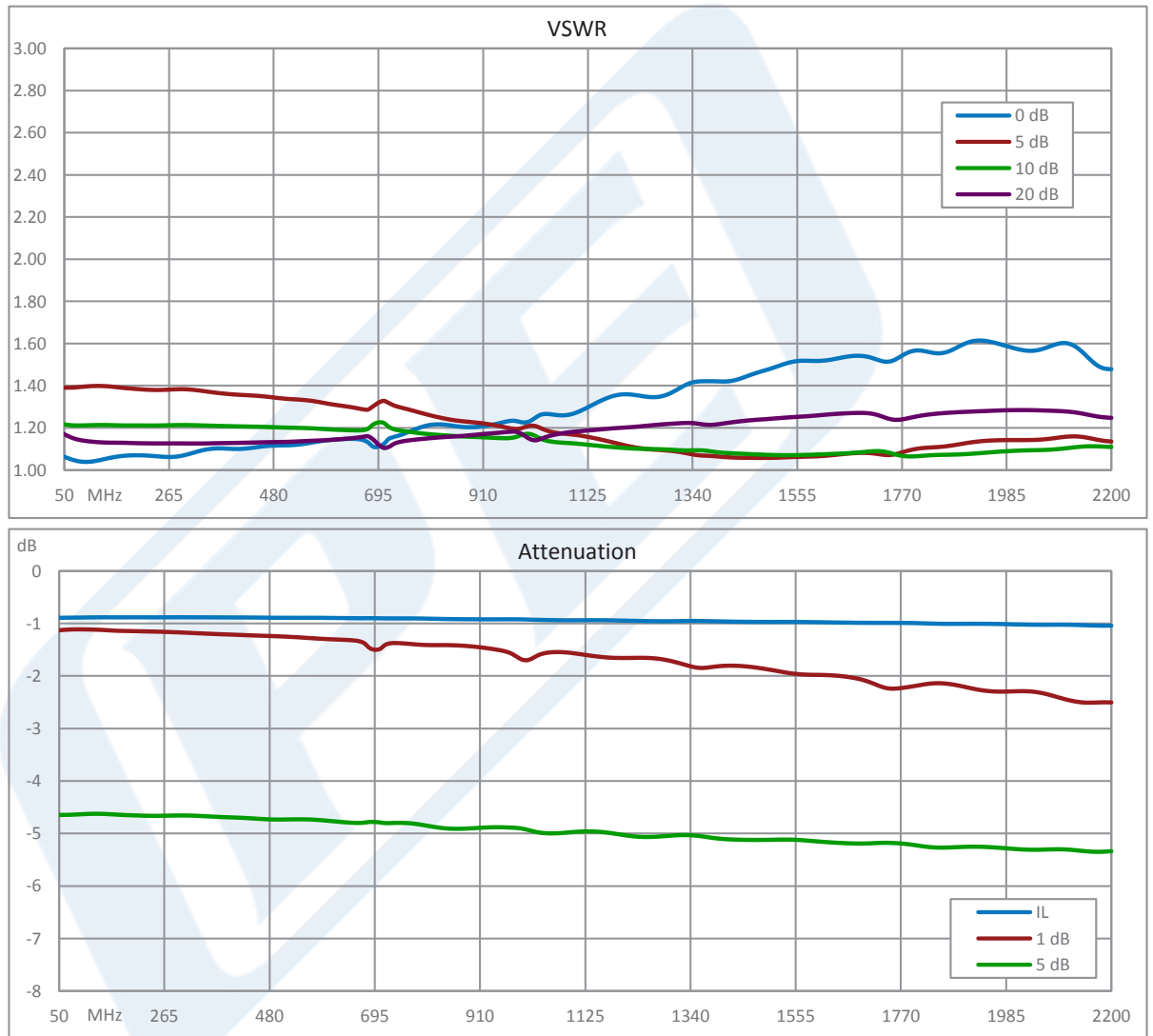


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Performance Data



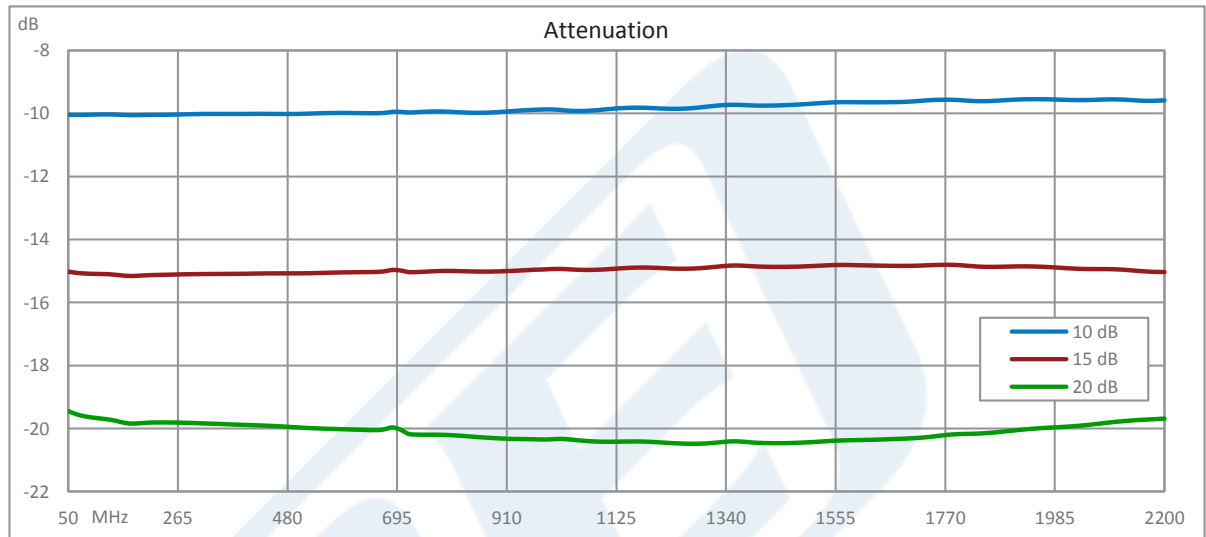
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0 to 20 dB Voltage Variable Attenuator, PIN Diode, 50 MHz to 2.2 GHz, Rated to 10 dBm, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

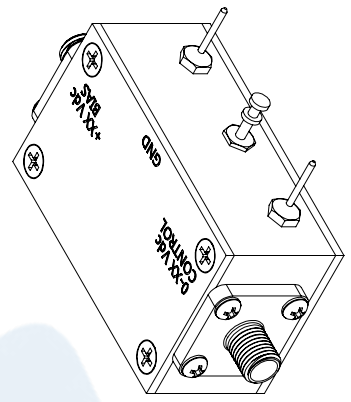
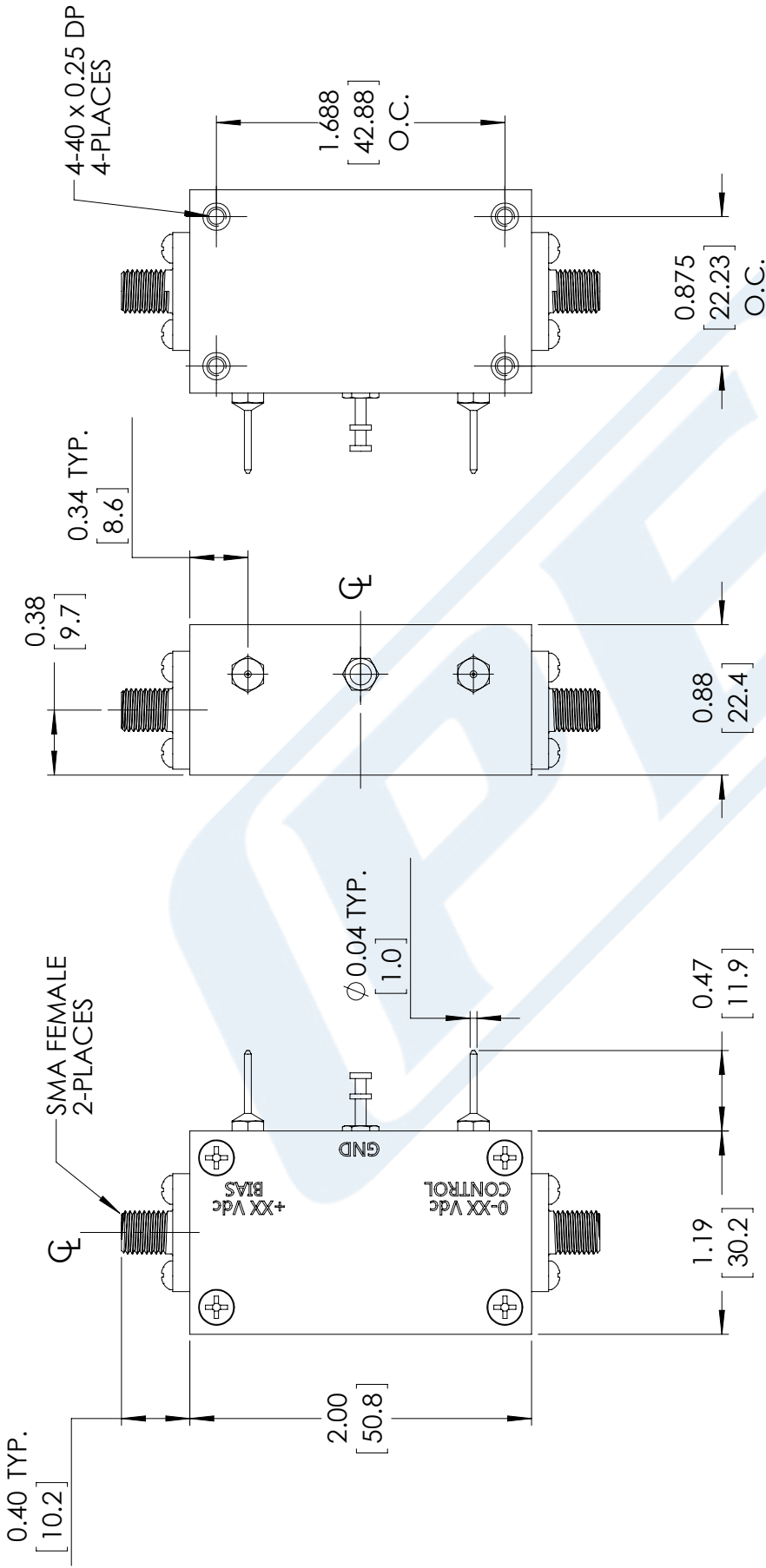
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

# PE70A1031 CAD Drawing

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STANDARD TOLERANCES  
.XX ±0.01  
.XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

<p>NOTES:</p> <ol style="list-style-type: none"> <li>UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.</li> <li>ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME</li> <li>DIMENSIONS ARE IN INCHES [mm].</li> </ol>	
<p>DWG TITLE</p> <h2>PE70A1031</h2>	
<p>CAGE CODE</p> <h3>53919</h3>	<p>SCALE</p> <p>N/A</p>
<p>CAD FILE</p> <p>061917</p>	<p>SIZE</p> <p>A</p>
<p>PN</p> <p>CN_0992</p>	

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