Voltage Variable PIN Diode Attenuator From 0 to 20 dB 50 MHz to 2.2 GHz Rated To 10 Watts And SMA Solder Pin Control

The FMAT1031 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.

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
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</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>0.05</td>
<td>2.2</td>
<td>2.2</td>
<td>GHz</td>
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<tr>
<td>Mean Attenuation Range</td>
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<td>20</td>
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<tr>
<td>Insertion Loss</td>
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<tr>
<td>VSWR</td>
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<td>Power Rating</td>
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<td>dBm</td>
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<td>Analog Control</td>
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<td>dB/Volt</td>
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<tr>
<td>Control</td>
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<td>10</td>
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<td>Volts</td>
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<tr>
<td>DC Power Supply</td>
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<td></td>
<td>2</td>
<td>mA</td>
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<tr>
<td>to 5 VDC</td>
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</tbody>
</table>

### Mechanical Specifications

- **Size**
  - Input Connector: SMA Female
  - Output Connector: SMA Female
  - Power and Control: Solder Pin

### Environmental Specifications

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

### 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.
Typical Performance Data

**VSWR**

- 0 dB
- 5 dB
- 10 dB
- 20 dB

**Attenuation**

- IL
- 1 dB
- 5 dB
Voltage Variable PIN Diode Attenuator From 0 to 20 dB 50 MHz to 2.2 GHz Rated To 10 Watts And SMA Solder Pin Control from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: Voltage Variable PIN Diode Attenuator From 0 to 20 dB 50 MHz to 2.2 GHz Rated To 10 Watts And SMA Solder Pin Control FMAT1031

**FAIRVIEW MICROWAVE INC.**

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**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].

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**STANDARD TOLERANCES**

<p>| | |</p>
<table>
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<td>.XXX</td>
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*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES*

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**FMAT1031**

**CAGE CODE** 3FKR5