

**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)

Description	Min	Typ	Max	Unit
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

**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

**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)

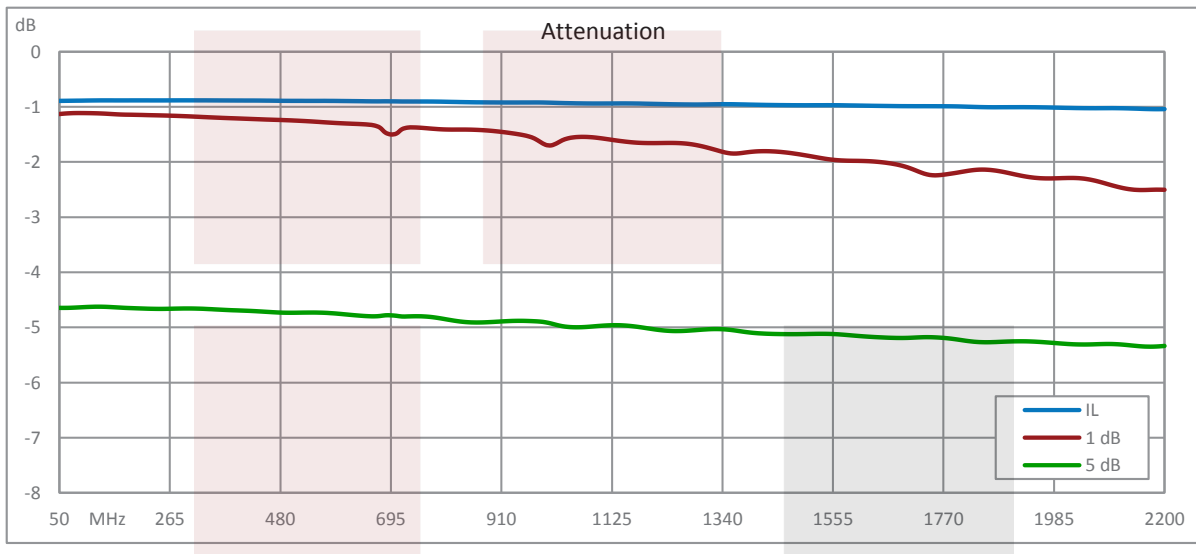
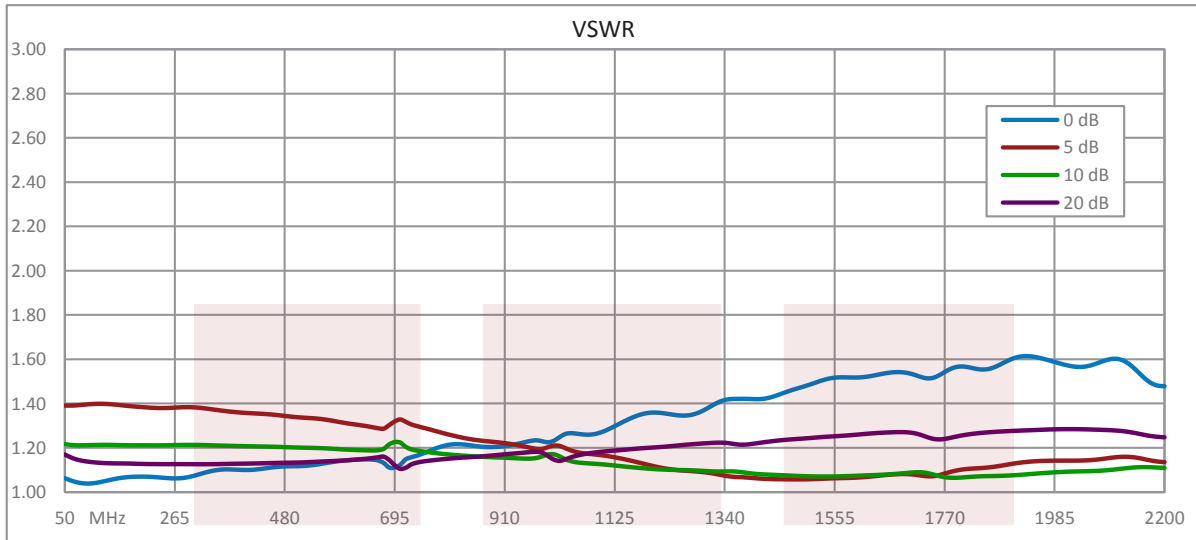
**Plotted and Other Data**

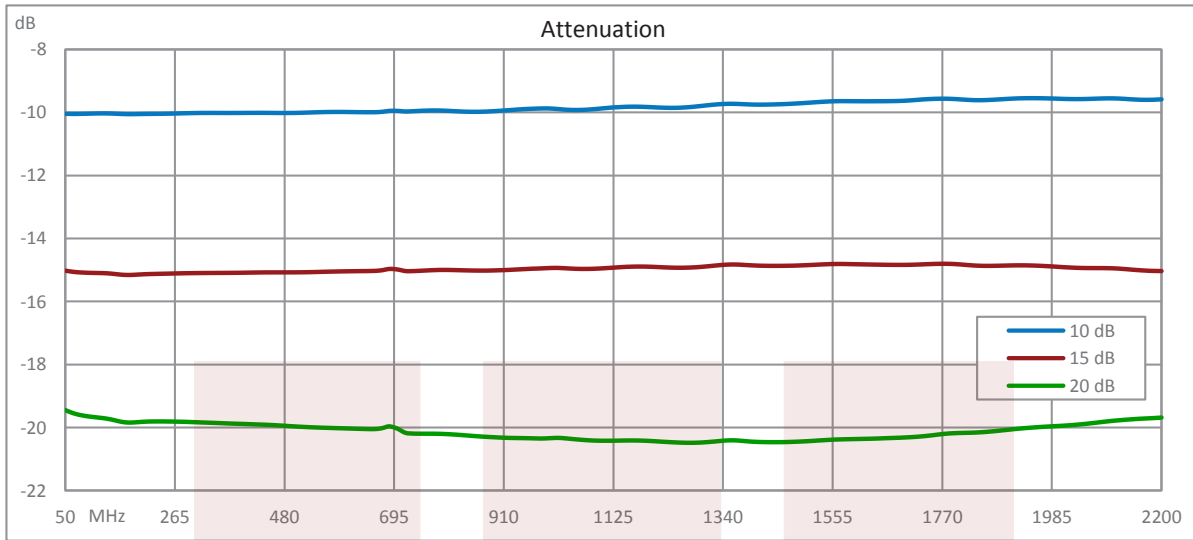
Notes:

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

Fairview Microwave  
301 Leora Ln., Suite 100  
Lewisville, TX 75056  
Tel: 1-800-715-4396 / (972) 649-6678  
Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

**Typical Performance Data**



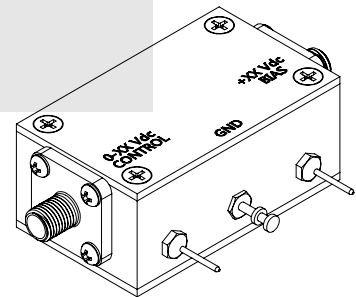
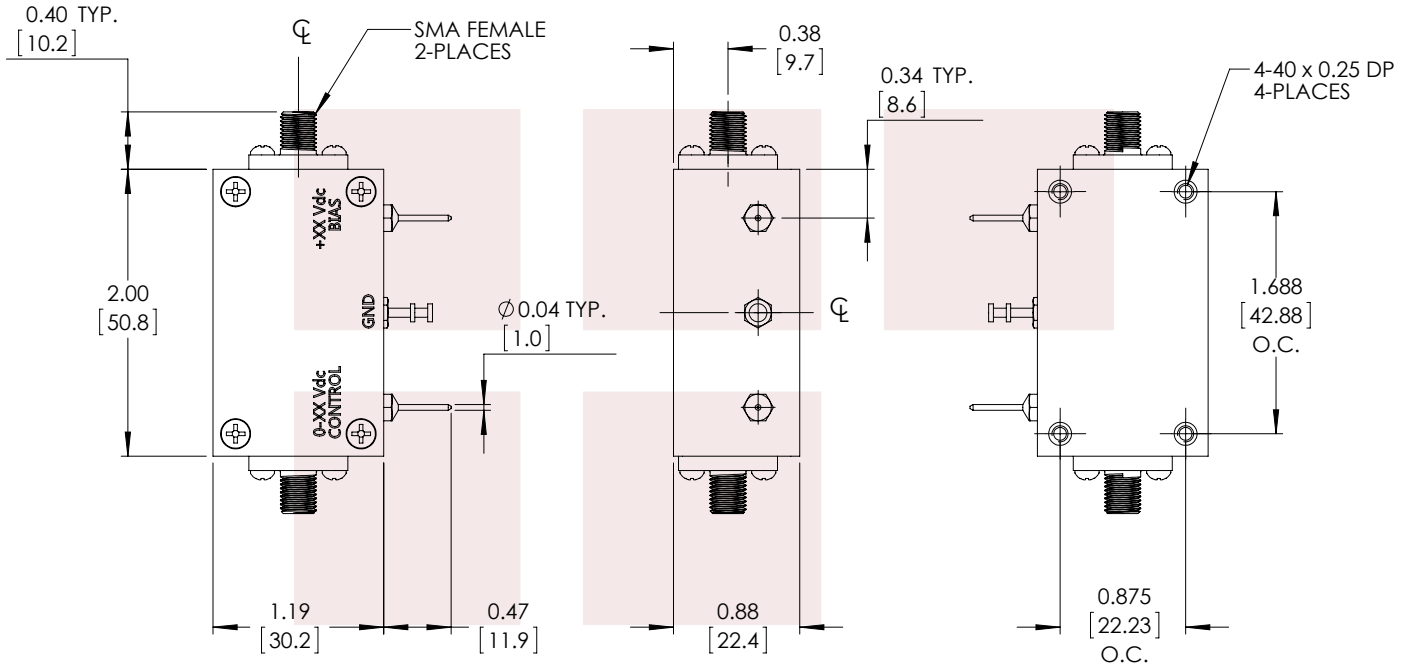


Voltage Variable PIN Diode Attenuator From 0 to 20 dB 50 MHz to 2.2 GHz Rated To 10 Watts And SMA Solder Pin Control from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas.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

URL: <https://www.fairviewmicrowave.com/20db-voltage-variable-10-watts-attenuator-pin-diode-2.2-ghz-fmat1031-p.aspx>

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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



STANDARD TOLERANCES	
.XX	±0.01
.XXX	±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

**FAIRVIEW MICROWAVE INC.**  
 ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM

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].

TITLE  
 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

DWG NO	FMAT1031		CAGE CODE		
			3FKR5		
CAD FILE	061917	SHEET	1 OF 1	SCALE	N/A
				SIZE	A
					CN_0992