

## 500 MHz to 2 GHz Field Replaceable SMA Positive Slope Equalizer, Max Pin +30, 1.8 dB Loss and 6 Fixed Equalizing Value

The FMAT9002 is a Positive Slope Equalizer module that covers a frequency range from 500 MHz to 2000 MHz and exhibits a fixed attenuation response that increases linearly with frequency. The 50 Ohm design has an equalizing value of 6 dB typical at 500 MHz. Positive Slope Equalizers are particularly useful in compensating for gain variation in systems where excessive losses occur at the lower end of the frequency band which may be due to low pass filtering effects in RF & Microwave systems and high-speed digital systems, or from long lengths of waveguide transmission. Impressive performance includes low insertion loss of 1.8 dB typ, 1.8:1 typ VSWR, and maximum RF input power handling of +30 dBm. The rugged and compact package design supports field replaceable SMA female connectors, operates across a wide temperature range of -20°C to +60°C, and can withstand relative humidity levels up to 95%.



### Features:

- Positive Slope Equalizer Module
- Frequency Range: 500 MHz to 2000 MHz
- 6 dB Fixed Equalizing Value
- Insertion Loss: 1.8 dB typ
- VSWR: 1.8:1 typ
- Maximum RF Input Power: +30 dBm
- 50 Ohm Design
- Field Replaceable SMA Connectors
- Compact Package Design withstands up to 95% Relative Humidity
- -20°C to +60°C Operating Temperature

Description	Min	Typ	Max	Units
Frequency Range	0.5		2	GHz
Small Signal Insertion Loss		1.8	2.5	dB
Equalizing Type		Positive		
Equalizing Value	5	6	7	dB
Input VSWR		1.8:1	2.5:1	
Output VSWR		1.8:1	2.5:1	
Impedance(IN/Out)		50		Ω
RF Input Power			+30	dBm

### Mechanical Specifications

Input Connector	SMA Female (Field Replaceable)
Output Connector	SMA Female (Field Replaceable)
Length	0.98in [24.89mm]
Width	0.87in [22.1mm]
Height	0.39in [9.91mm]
Weight	0.05lbs

### Environmental

Temperature Operating Range	-20 to +60 °C
Storage Range	-40 to +65 °C
Humidity	95% Non-Condensing

### Applications:

- Low Pass Filtering Compensation
- Cable or Waveguide Loss Compensation
- Amplifier Flatness Compensation
- Microwave Radio
- RF Transceivers
- SATCOM
- Test & Measurement
- Telecom Infrastructure

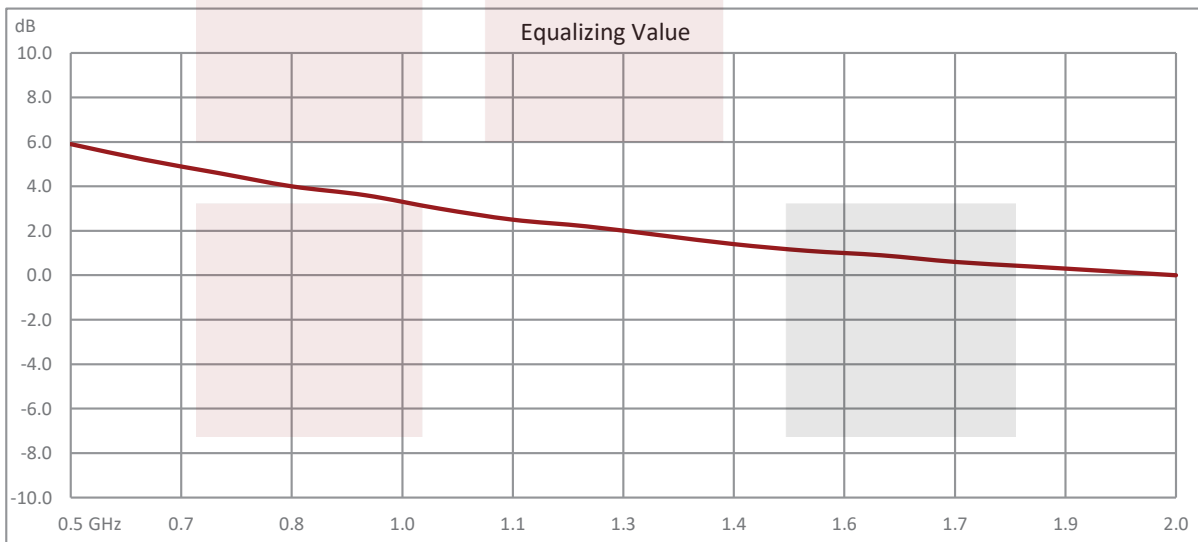
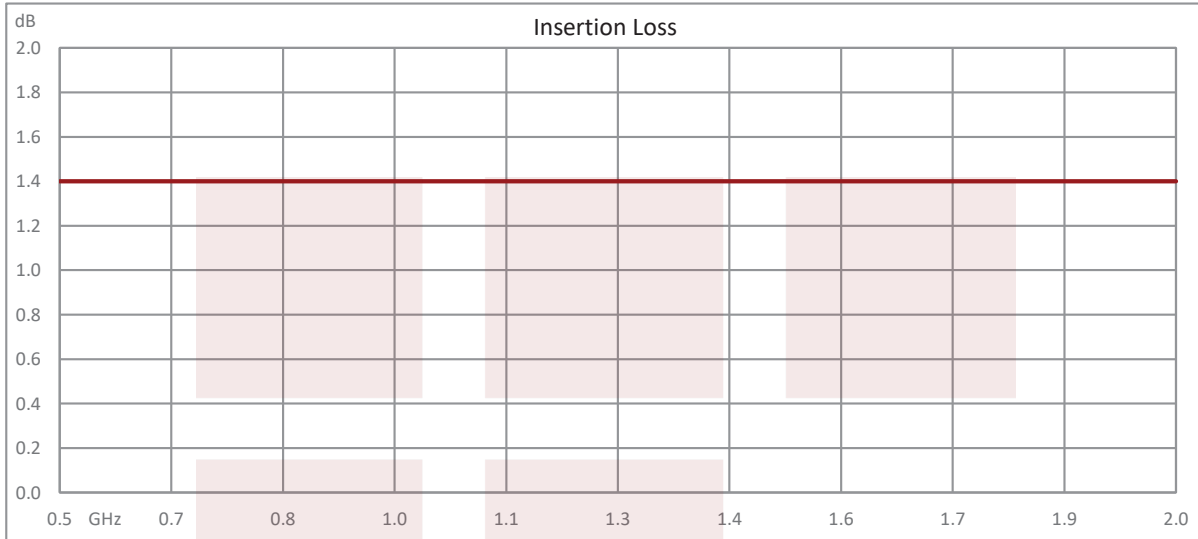
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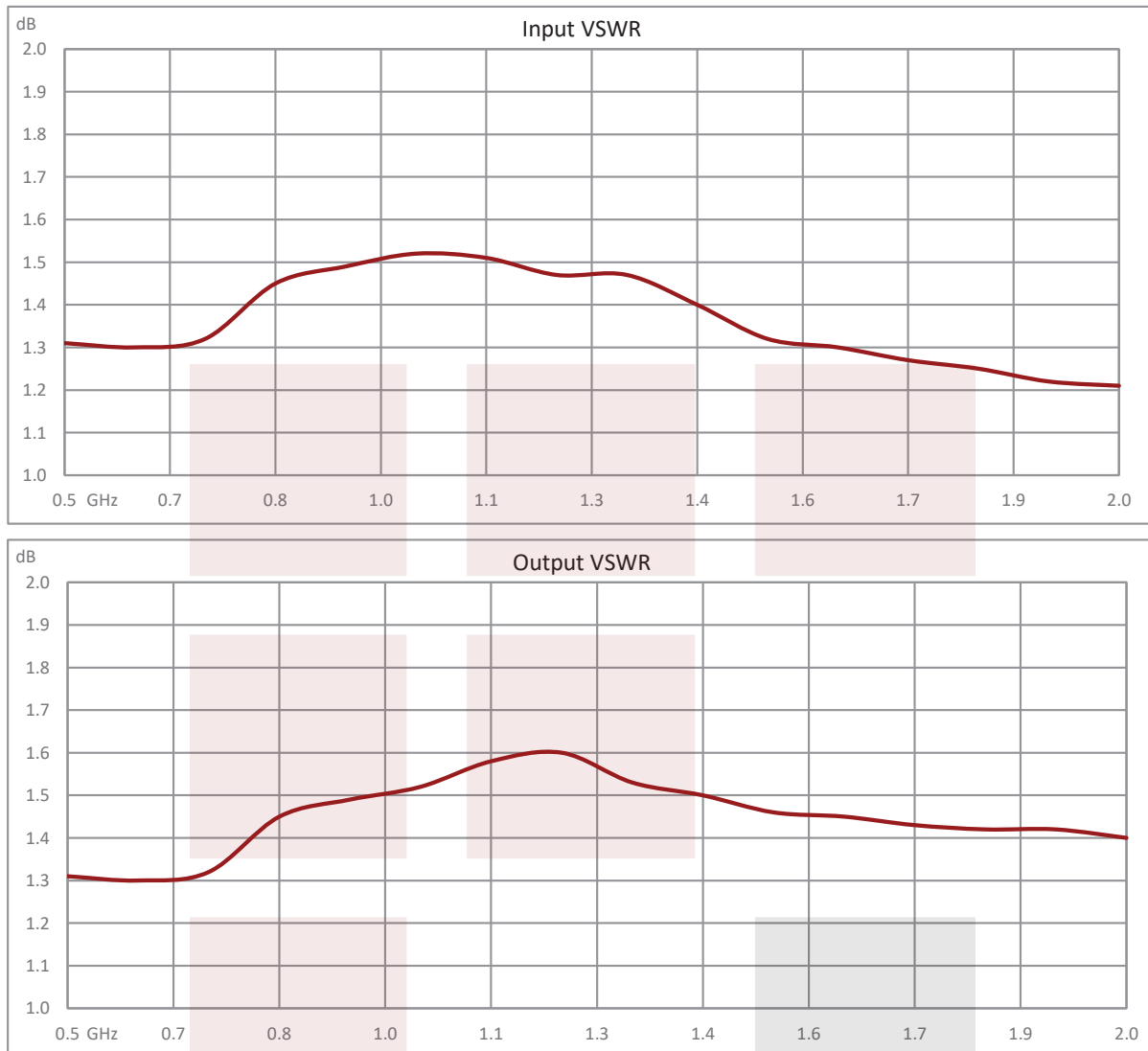
**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

- Values at +25 °C, sea level





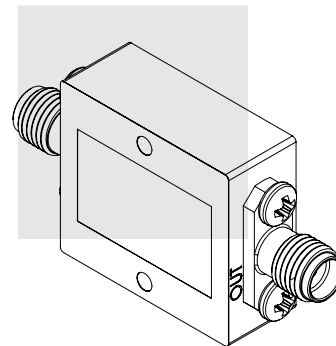
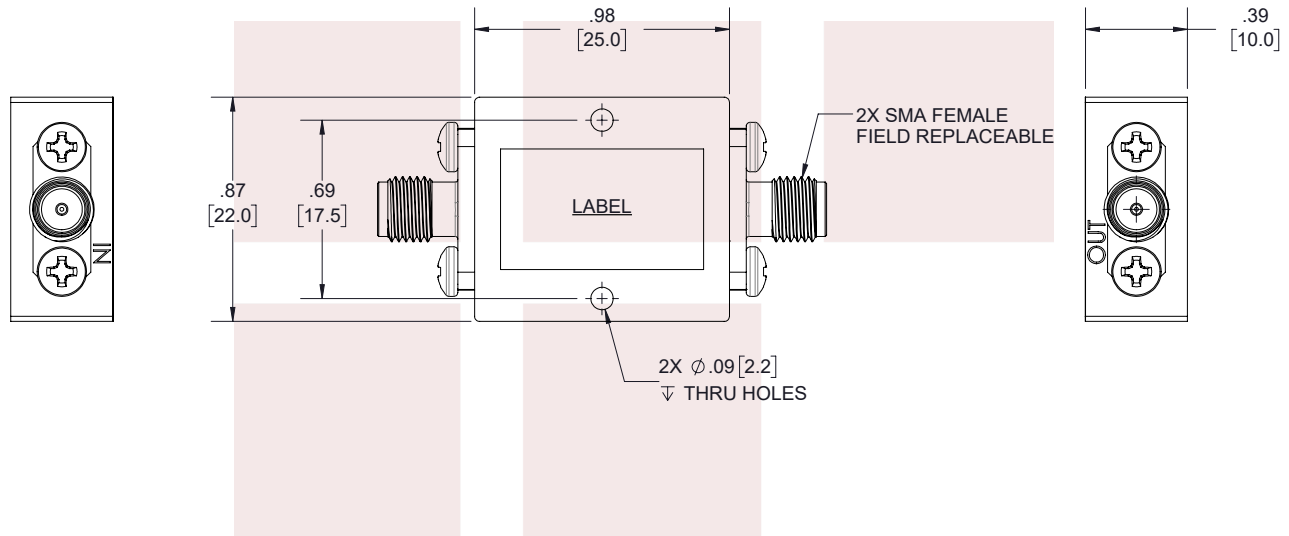
500 MHz to 2 GHz Field Replaceable SMA Positive Slope Equalizer, Max Pin +30, 1.8 dB Loss and 6 Fixed Equalizing Value from Pasternack Enterprises has same day shipment for domestic and International orders Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [500 MHz to 2 GHz Field Replaceable SMA Positive Slope Equalizer, Max Pin +30, 1.8 dB Loss and 6 Fixed Equalizing Value FMAT9002](https://www.fairviewmicrowave.com/undefined-url-for-pn-fmat9002-fmat9002-p.aspx)

URL: <https://www.fairviewmicrowave.com/undefined-url-for-pn-fmat9002-fmat9002-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. 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.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	23-01-2020	TGALLA



**LABEL:**

FAIRVIEW MICROWAVE  
FMAT9002  
D/C: YYWW

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**TITLE**

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

**THIRD-ANGLE PROJECTION**



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SHEET 1 OF 1

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE A	CAGE CODE 3FKR5	DRAWN BY MVEERAPPAN	ITEM NO. FMAT9002	REV A
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T-Rev.D