

Biased Detector With SMA Male to SMA Female and Negative Video Out Operating From 1 GHz to 2 GHz

The FMMT1002 is a biased Schottky detector that displays an extremely flat frequency response over a broad frequency range from 1 GHz to 2 GHz. The model features Negative video output polarity, with no external DC bias source is required. Additional features include 50 ohm matched inputs, high voltage sensitivity for very small signal detection of 2000 mV/mW typical, and can withstand maximum input power levels up to +23 dBm CW. Operating temperature range is -55°C to +125°C. The compact and rugged cylindrical package supports an SMA male input connector and SMA female output connector and is ideal for use with precision test and measurement, instrumentation, and subsystem assemblies.

Electrical Specifications

Description	Min	Typ	Max	Unit
Frequency Range	1000 MHz		2 GHz	
Flatness		±0.25		dB
Input Power			+23	dBm
Operating Temperature Range	-55		+125	deg C

Electrical Specification Notes:
 @ +25 deg C, 100uA Bias, and -20 dBm Pin
 Voltage Sensitivity is that of an open circuit
 TSS is measured with a 2 MHz video bandwidth and a 2 dB NF Amplifier



Features:

- Biased Schottky Diode Detector
- 1 GHz to 2 GHz Frequency Range
- Extremely Flat Frequency Response
- Maximum Input Power +23 dBm
- Negative Video Output Polarity

Applications:

- Electronic Warfare
- Test & Measurement
- System Monitoring
- AM Noise Measurements
- Military & Space
- Radar
- Pulsed RF Measurements in Ultra Broadband Applications
- Leveling Pulse Signal Sources
- Military Communications Systems

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Mechanical Specifications

Size	
Length	1.23 in [31.24 mm]
Width	0.314 in [7.98 mm]
Weight	0.0215 lbs [9.75 g]

Environmental Specifications

Temperature	
Operating Range	-55 to +125 deg C
Storage Range	-65 to +150 deg C

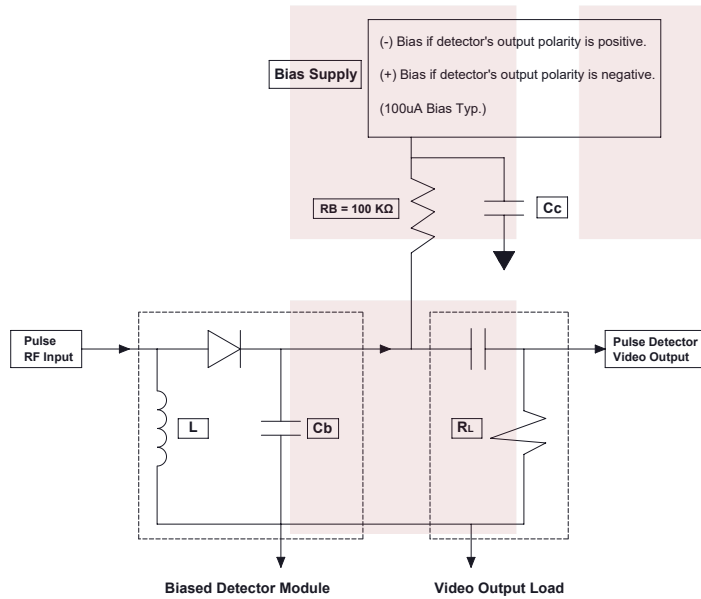
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

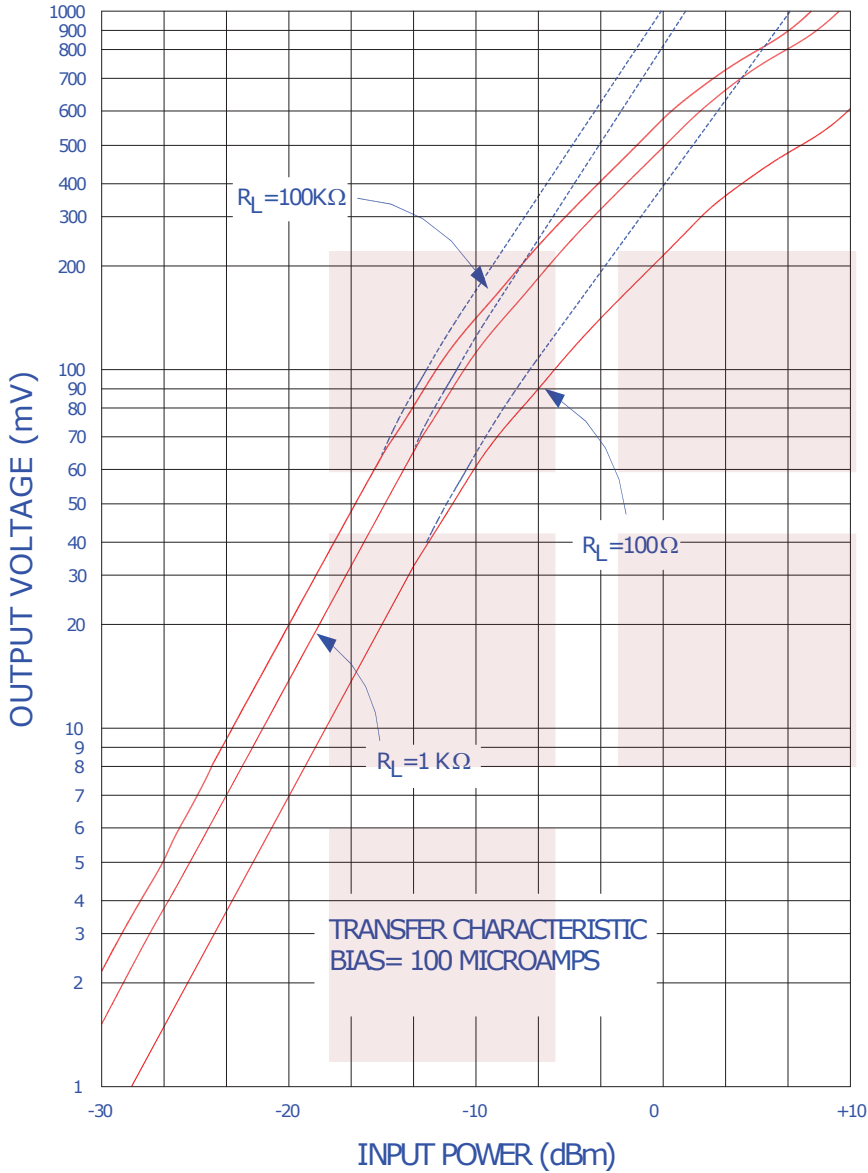
Functional Block Diagram

Biased Schottky Detector Application Circuit

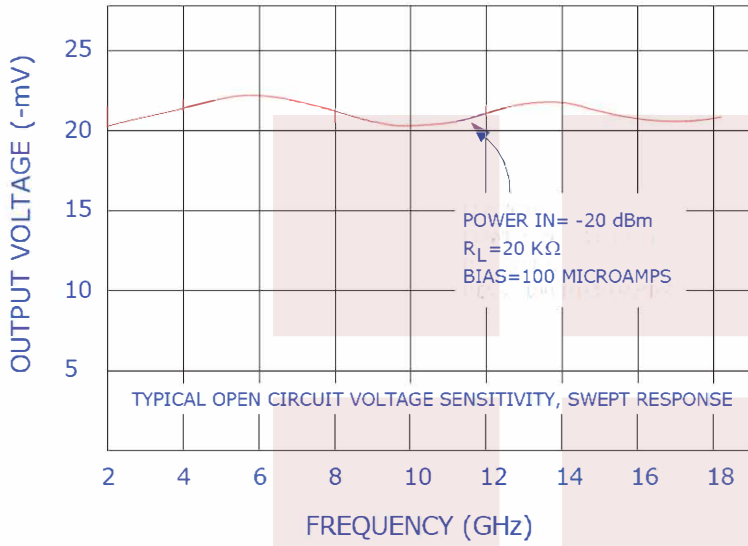


Typical Performance Data

TRANSFER CHARACTERISTIC



Voltage Output Vs. Frequency

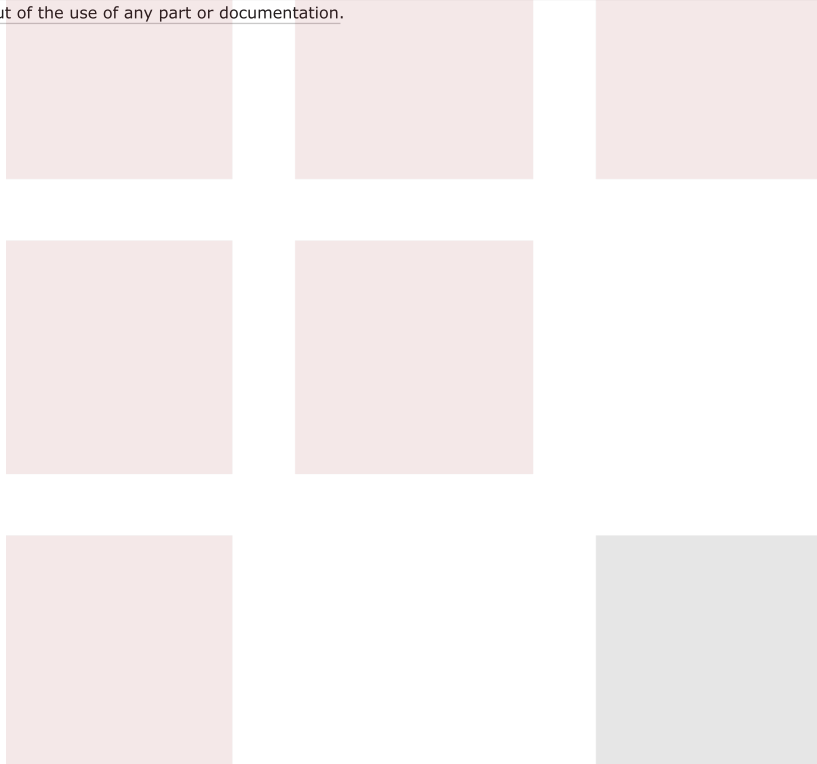


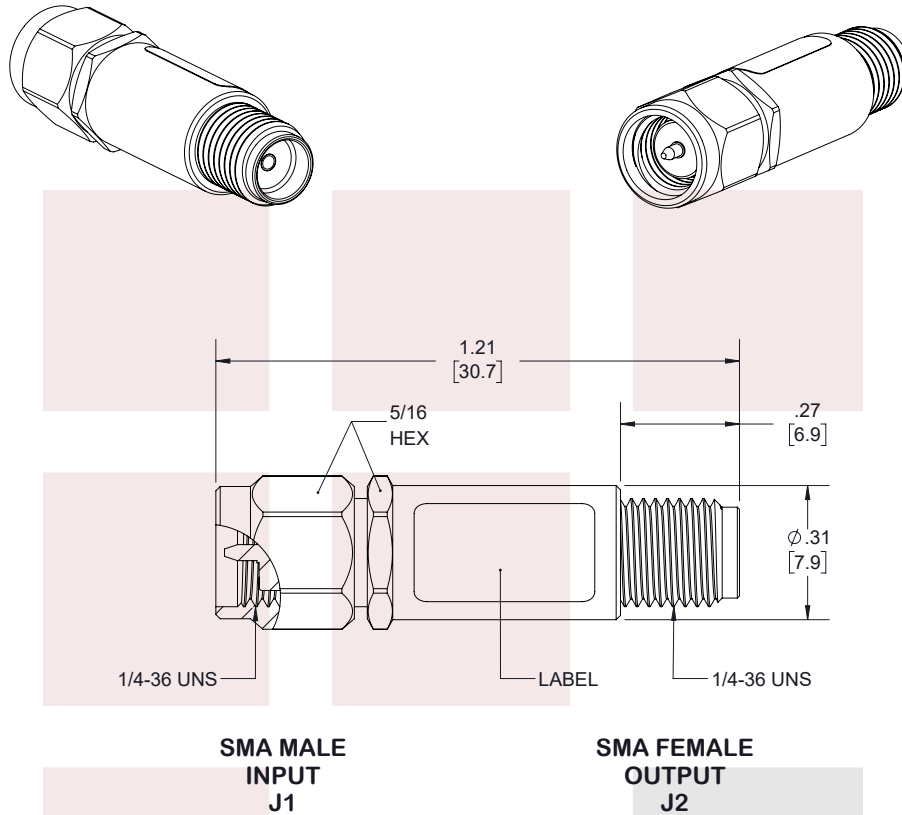
Biased Detector With SMA Male to SMA Female and Negative Video Out Operating From 1 GHz to 2 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Biased Detector With SMA Male to SMA Female and Negative Video Out Operating From 1 GHz to 2 GHz FMMT1002](#)

URL: <https://www.fairviewmicrowave.com/biased-detector-sma-male-1-2-ghz-fmmt1002-p.aspx>

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LABEL:

FAIRVIEW MICROWAVE
 FMMT1002
 DATE CODE: XXXX

STANDARD TOLERANCES

.X ±0.2
 .XX ±0.01
 .XXX ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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TITLE Biased Detector With SMA Male to SMA Female and Negative Video Out Operating From 1 GHz to 2 GHz		DWG NO FMMT1002		CAGE CODE 3FKR5	
CAD FILE	110117	SHEET	1 OF 1	SCALE	N/A
				SIZE	A
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