

**Schottky Zero Bias Detector, 2 GHz to 18 GHz, SMA,
Negative Video Out, +20 dBm max Pin**

The SMD0218 is a zero bias Schottky detector that displays an extremely flat frequency response over a broad frequency range from 2 GHz to 18 GHz. The model features negative video output polarity and operates over a wide dynamic range of -30 dBm to +20 dBm input power. No external DC bias source is required. Performance includes 50 ohm matched inputs for excellent VSWR of 1.6:1 typical, high voltage sensitivity for very small signal detection of 500 mV/mW typical, and can withstand maximum input power levels up to +20 dBm CW. Operating temperature range is -25°C to +80°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	2		18	GHz
VSWR		1.6:1	1.7:1	
Voltage Sensitivity		500		mV/mW
Flatness		±0.4	±0.5	dB
Input Power			+20	dBm
Video Output Resistance				
Video Capacitance		20		pF
Dynamic Range	-30		+20	dBm
Operating Temperature Range	-25		+80	deg C



Features:

- Zero Bias Schottky Diode Detector
- 2 GHz to 18 GHz Frequency Range
- Extremely Flat Frequency Response
- Maximum Input Power +20 dBm, Peak Input Power +27 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

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
sales@fairviewmicrowave.com

Mechanical Specifications

Size	
Length	1.21 in [30.73 mm]
Weight	0.023 lbs [10.43 g]
Connector 1	SMA Male
Connector 2	SMA Female

Environmental Specifications

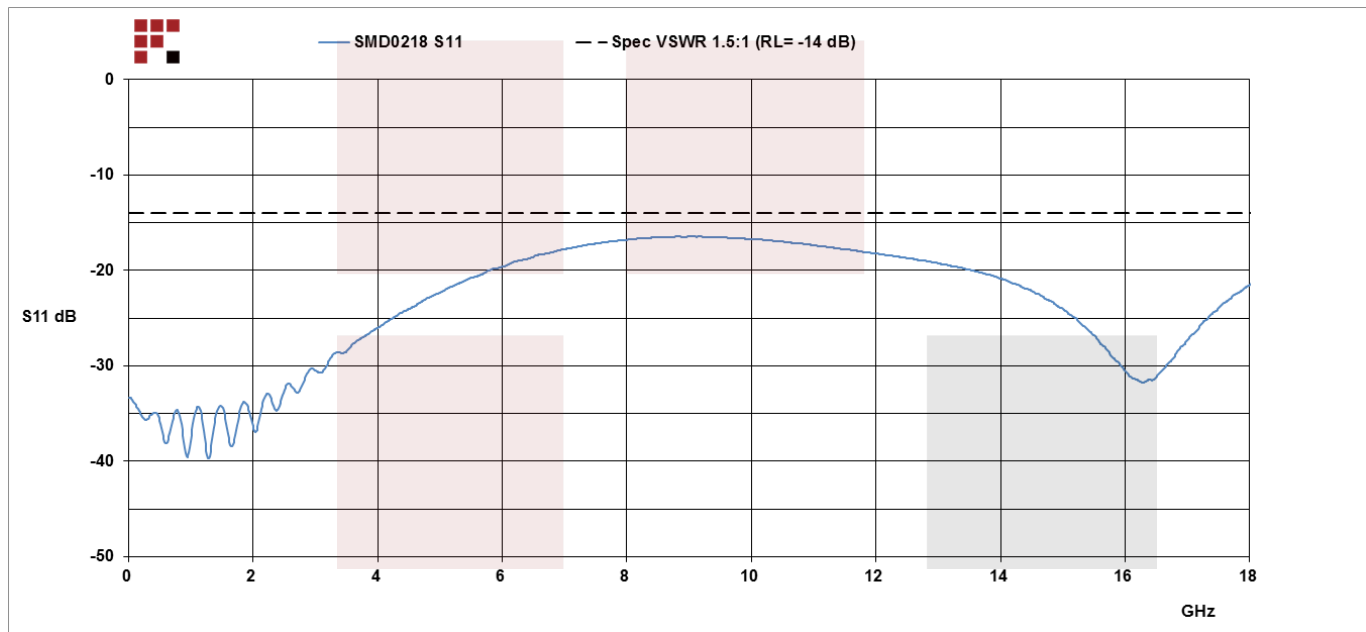
Temperature	
Operating Range	-25 to +80 deg C
Storage Range	-45 to +100 deg C

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

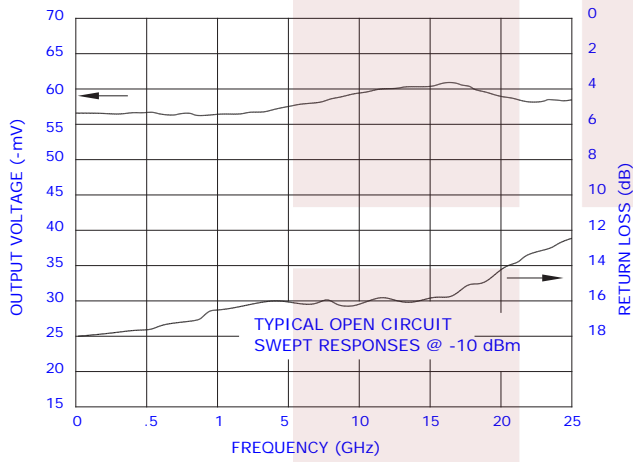
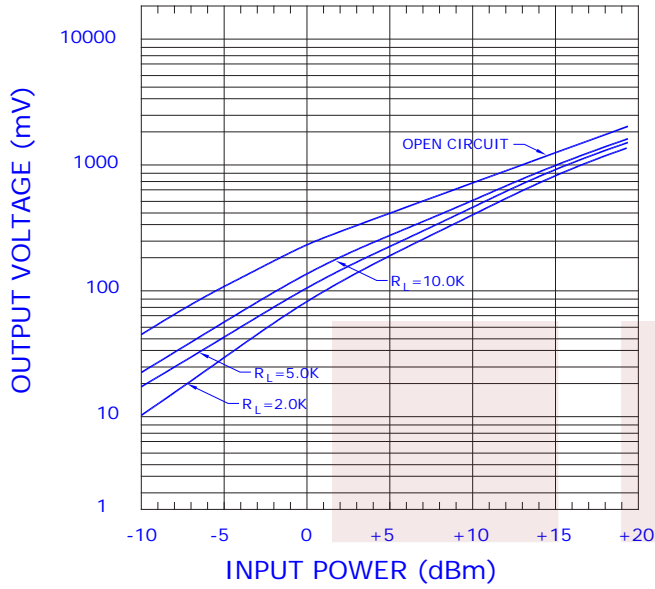
Plotted and Other Data

Notes:

Typical Performance Data



Transfer Curve

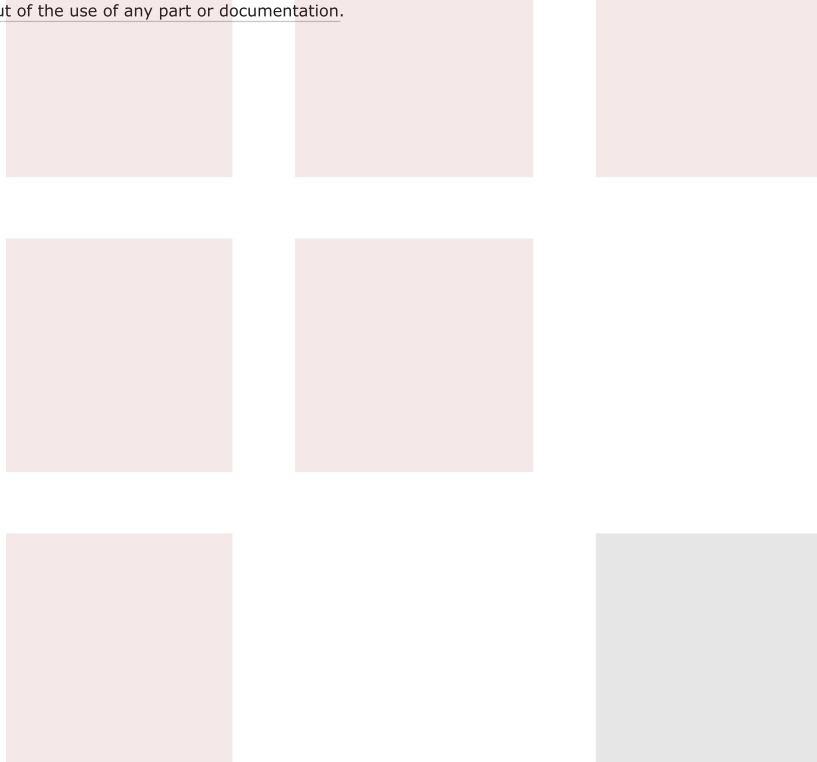


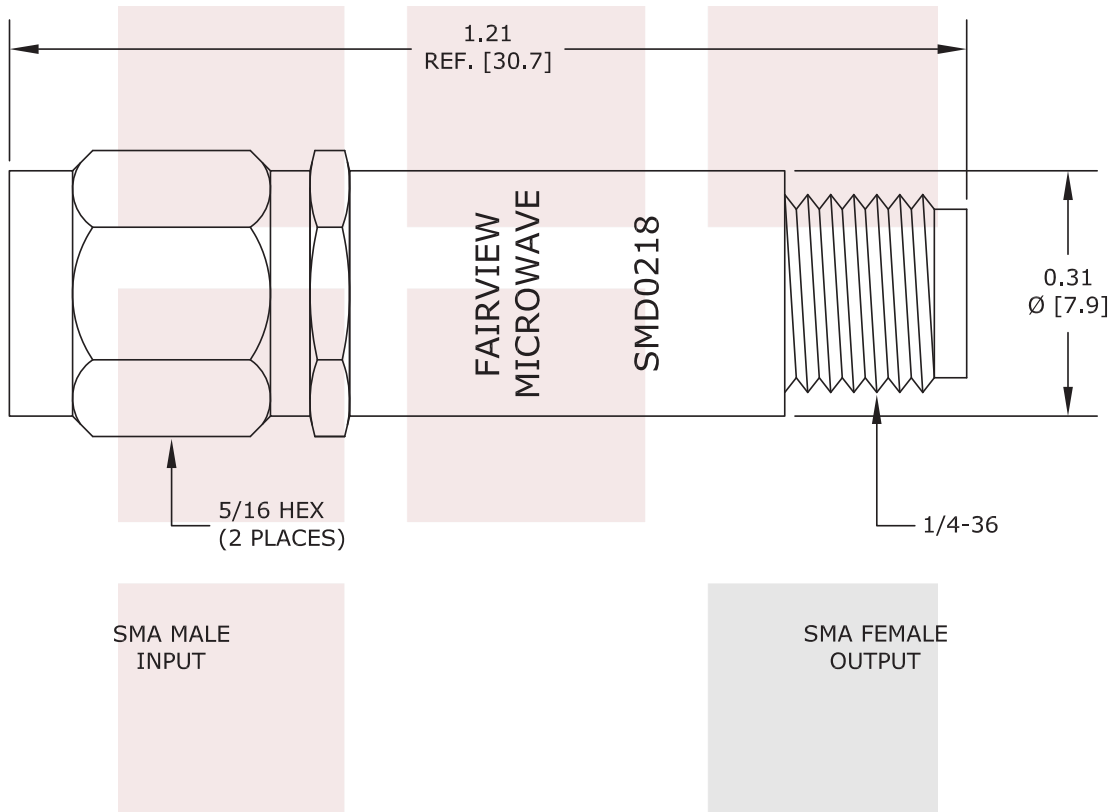
Schottky Zero Bias Detector, 2 GHz to 18 GHz, SMA, Negative Video Out, +20 dBm max Pin from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Schottky Zero Bias Detector, 2 GHz to 18 GHz, SMA, Negative Video Out, +20 dBm max Pin SMD0218](#)

URL: <https://www.fairviewmicrowave.com/zero-biased-detector-sma-male-negative-2-18-ghz-smd0218-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

.X ±0.2
.XX ±0.1
.XXX ±0.05

*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 Schottky Zero Bias Detector, 2 GHz to 18 GHz, SMA, Negative Video Out, +20 dBm max Pin		DWG NO SMD0218		CAGE CODE 3FKR5	
CAD FILE	091616	SHEET	SCALE	N/A	SIZE A 2233