

2.92mm Schottky Diode Zero Bias Detector, 500 MHz to 18 GHz, +20 dBm Max Pin, Positive Video Out, MIL-STD-202, Radial



FMMT6030

Features

- Zero bias Schottky diode detector
- Broadband frequency range: 0.5 GHz to 18.0 GHz
- Positive video output polarity
- Sensitivity: 500 $\pm$ 50 mV/mW typical
- Frequency flatness: $\pm$ 3.5 dB max
- Low VSWR: 2.0:1
- Maximum input power: +20 dBm
- 2.92mm male RF input and 2.92mm female video output connectors
- Operating temperature range: -54 °C to +100 °C
- Environmentally tested to MIL-STD-202 (humidity, shock, vibration, altitude, temperature cycle)

Applications

- RF power and level monitoring
- Broadband test and measurement equipment/Transmitter monitoring and leveling
- Radar and surveillance systems
- Electronic warfare (EW) and ECM receivers
- detector front-ends for receiver chains
- General-purpose RF measurement applications
- Military and aerospace systems

Description

This coaxial packaged Zero Bias Schottky Diode Detector operates over a broadband frequency range of 0.5 GHz to 18.0 GHz and is designed for accurate RF signal detection in CW and broadband measurement applications. The zero-bias Schottky design provides reliable detection without the need for external biasing, making it ideal for compact and simplified system designs. The detector delivers a stable positive polarity video output with a typical sensitivity of 500 $\pm$ 50 mV/mW, dependent on input power and frequency. With good frequency flatness and low VSWR, this detector supports consistent performance across a wide frequency band. The rugged 2.92mm-connectorized package is environmentally qualified to MIL-STD-202, ensuring dependable operation in harsh military, aerospace, and laboratory environments. Maximum input power handling is +20 dBm.

Electrical Specifications (@ +25°C)

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.5		18	GHz
VSWR		1.5:1	2:1	
Voltage Sensitivity		500		mV/mW
Flatness			$\pm$ 3.5	dB
Input Power			+20	dBm CW
Video Capacitance		30		pF
Operating Temperature Range	-54		+100	deg C
Output Polarity		Positive		

Electrical Specification Notes:

Mechanical Specifications

Size

Length	1.3 in	[33.02 mm]
Width	0.31 in	[7.87 mm]
Height	0.31 in	[7.87 mm]
Weight	0.03 lbs	[13.61 g]
Connector 1	2.92mm Male	

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Connector 2 2.92mm Female

Configuration

Mechanical Specification Notes:

Environmental Specifications

Temperature

Operating Temperature

-54 to +100 deg C

Storage Temperature

-65 to +125 deg C

Temperature Cycling

MIL-STD-202, Method 107D Cond. A

Humidity

MIL-STD-202, Method 103B Cond. B

Shock

MIL-STD-202, Method 213B Cond. B

Vibration

MIL-STD-202, Method 204D Cond. B

Altitude

MIL-STD-202, Method 105C Cond. B

Environmental Specification Notes:

Compliance Certifications

Plotted and Other Data

Notes:

2.92mm Schottky Diode Zero Bias Detector, 500 MHz to 18 GHz, +20 dBm Max Pin, Positive Video Out, MIL-STD-202, Radial 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 Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [2.92mm Schottky Diode Zero Bias Detector, 500 MHz to 18 GHz, +20 dBm Max Pin, Positive Video Out, MIL-STD-202, Radial FMMT6030](#)

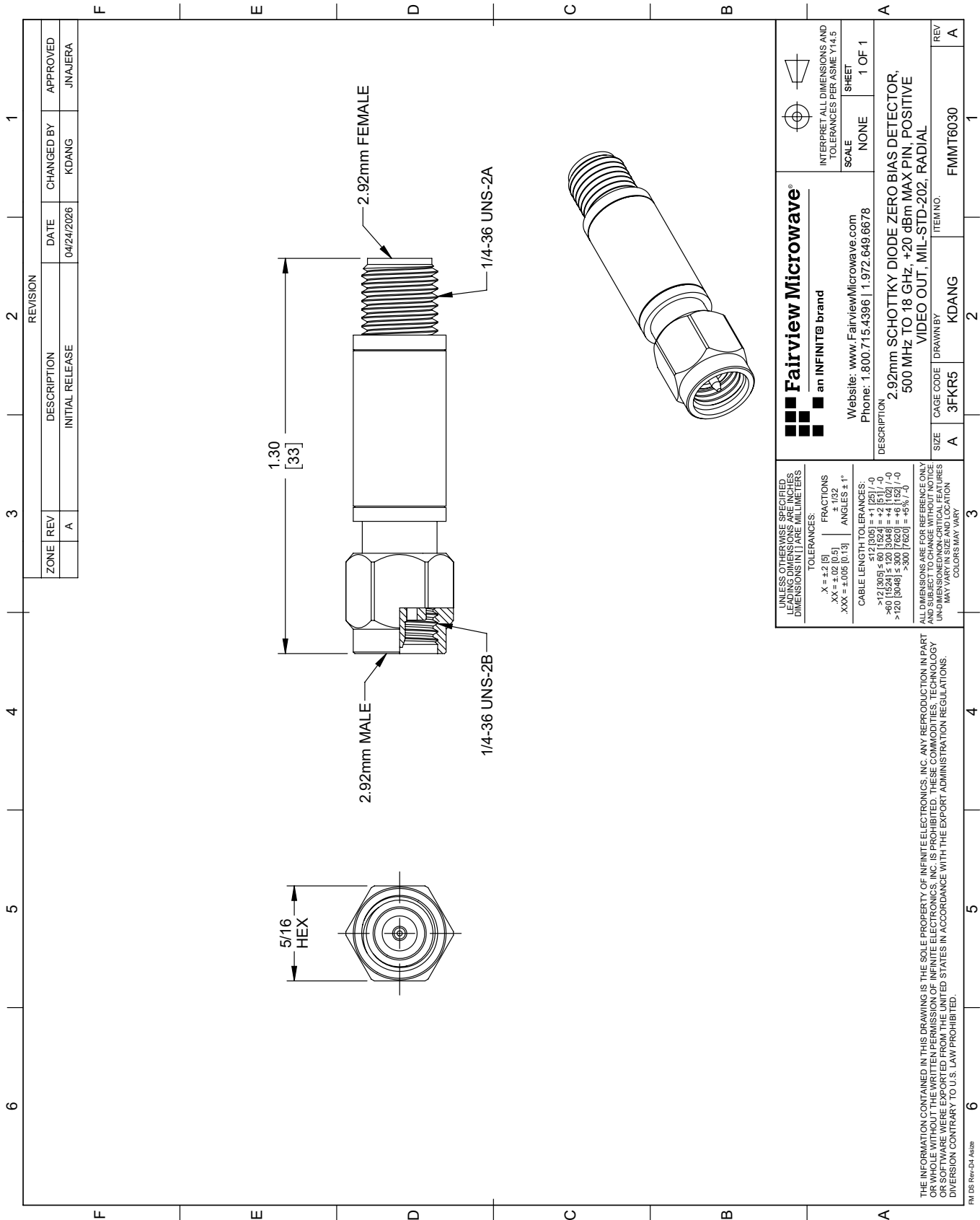
URL: <https://www.fairviewmicrowave.com/schottky-diode-zero-bias-detector-2.92mm-male-500-mhz-18-ghz-fmmt6030>

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FMMT6030 CAD Drawing

2.92mm Schottky Diode Zero Bias Detector, 500 MHz to 18 GHz, +20 dBm

Max Pin, Positive Video Out, MIL-STD-202, Radial



REVISION			DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION			
	A	INITIAL RELEASE	04/24/2026	KDANG	JNAJERA

Fairview Microwave® an INFINITI® brand		Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE IN MILLIMETERS.		TOLERANCES: X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13]	SCALE: NONE SHEET: 1 OF 1
CABLE LENGTH TOLERANCES: >12 [305] ≤ 60 [1524] = ±.125 [-0] >60 [1524] ≤ 120 [3048] = ±.125 [-0] >120 [3048] ≤ 300 [7620] = ±.125 [-0] >300 [7620] = ±.125 [-0]		ANGLES ± 1°	
ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS SHALL BE TO THE CENTER OF THE DIODE. DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.			
DESCRIPTION 2.92mm SCHOTTKY DIODE ZERO BIAS DETECTOR, 500 MHz TO 18 GHz, +20 dBm MAX PIN, POSITIVE VIDEO OUT, MIL-STD-202, RADIAL			
SIZE A	CAGE CODE 3FKR5	DRAWN BY KDANG	ITEM NO. FMMT6030
REV A			

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