

Schottky Zero Bias Detector, SMA, Positive Video Out, +20 dBm max Pin, 10 MHz to 12.4 GHz



PE8012P

Features

- Zero Bias Schottky Diode Detector
- 10 MHz to 12.4 GHz Frequency Range
- Extremely Flat Frequency Response
- Maximum Input Power +23 dBm (CW), Peak Input Power +27 dBm
- Positive 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

Description

The PE8012P is a zero bias Schottky detector that displays an extremely flat frequency response over a broad frequency range from 10 MHz to 12.4 GHz. The model features Positive 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 1.4:1 typical, high voltage sensitivity for very small signal detection of 500 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 (@ +25°C)

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.01		12.4	GHz
VSWR		1.4:1	1.6:1	
Voltage Sensitivity	450	500	600	mV/mW
Flatness		±0.3	±0.4	dB
Input Power			23	dBm CW
Video Capacitance	420	470	500	pF
Voltage Sensitivity Over Temperature	2.5	3	3.5	dB
Dynamic Range	-30		20	dBm
Operating Temperature Range	-55		125	deg C
Output Polarity		Positive		

Electrical Specification Notes:

Mechanical Specifications

Size

Length	1.21 in	[30.73 mm]
Width	0.31 in	[7.87 mm]
Height	0.31 in	[7.87 mm]
Weight	0.023 lbs	[10.43 g]
Connector 1	SMA Male	

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Connector 2 SMA Female

Configuration

Mechanical Specification Notes:

Environmental Specifications

Temperature

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

Environmental Specification Notes:

Compliance Certifications

Plotted and Other Data

Notes:

Schottky Zero Bias Detector, SMA, Positive Video Out, +20 dBm max Pin, 10 MHz to 12.4 GHz 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.

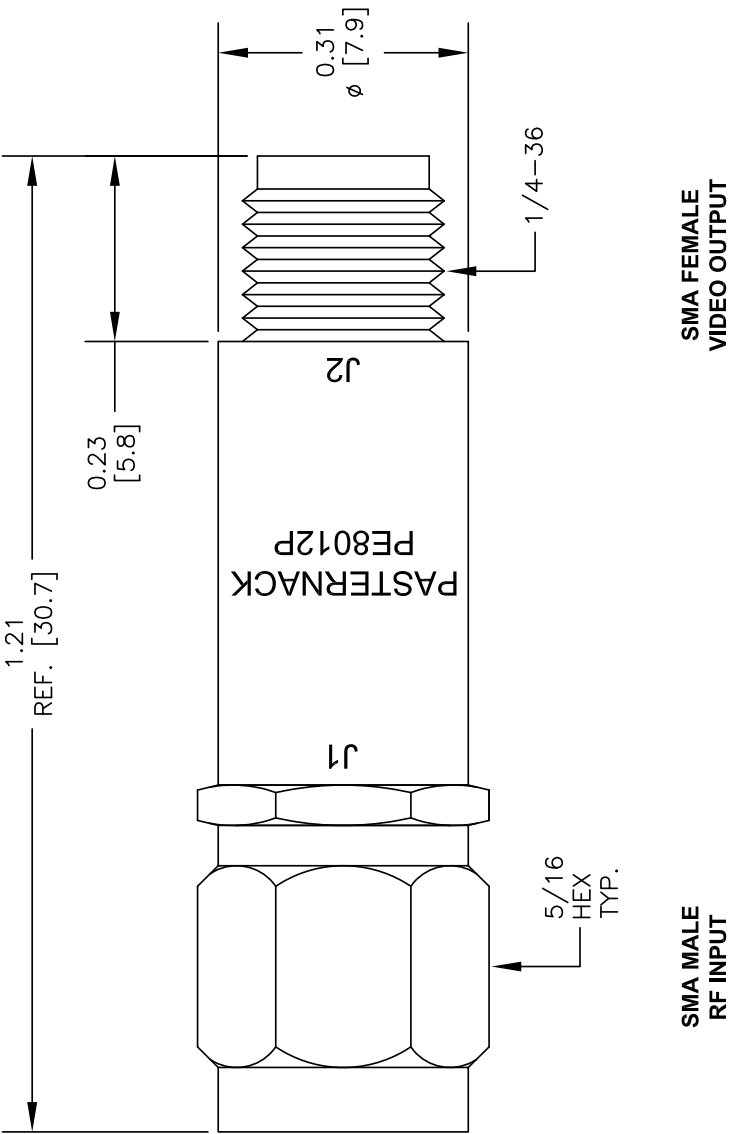
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Schottky Zero Bias Detector, SMA, Positive Video Out, +20 dBm max Pin, 10 MHz to 12.4 GHz PE8012P](#)

URL: <https://www.pasternack.com/50-ohm-sma-zero-biased-detector-positive-10-mhz-12400-mhz-pe8012p-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE8012P CAD Drawing

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DWG TITLE

PE8012P

FSCM NO. 53919

CAD FILE 100913

SCALE N/A

SIZE A

2233

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).



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