



## Zero Biased U Band Waveguide Detector, WR-19, Negative Video Out, 40 GHz to 60 GHz, UG-383/U

### TECHNICAL DATA SHEET

PE80T3003

The PE80T3003 is a U Band Waveguide Detector. The Detector operates in the 40 GHz to 60 GHz Frequency Range and has a Negative Output with a Sensitivity of -800 mV/mW Minimum and -1000 mV/mW Typical. The unit operates over a 0°C to +50°C Temperature Range and has a Maximum Input Power Rating of +20 dBm. The Detector has a WR-19 Waveguide with UG-383/U Flange as the RF connector and the DC Output Port uses an SMA Female Connector.

#### Features

- Frequency: 40 GHz to 60 GHz
- Sensitivity: -800 mV/mW Minimum; -1000 mV/mW Typical
- Maximum Power Input 20 dBm
- RF Connector WR-19 Waveguide with UG 383/U Flange

#### Applications

- Test Lab
- Military Communications
- Commercial Communications

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	40		60	GHz
Voltage Sensitivity	-800	-1,000		mV/mW
Input Power			+20	dBm

#### Mechanical Specifications

##### Temperature

Operating Range 0 to +50 deg C

##### Size

Length 1.24 in [31.5 mm]

Width 1 in [25.4 mm]

Height 0.75 in [19.05 mm]

Weight 0.0625 lbs [28.35 g]

RF Connector WR-19 Waveguide with UG-383/U Flange

DC Connector SMA Female

#### Compliance Certifications (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

Not RoHS Compliant

#### Plotted and Other Data

Notes:

- Values at +25 °C, sea level

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Zero Biased U Band Waveguide Detector, WR-19, Negative Video Out, 40 GHz to 60 GHz, UG-383/U PE80T3003](#)

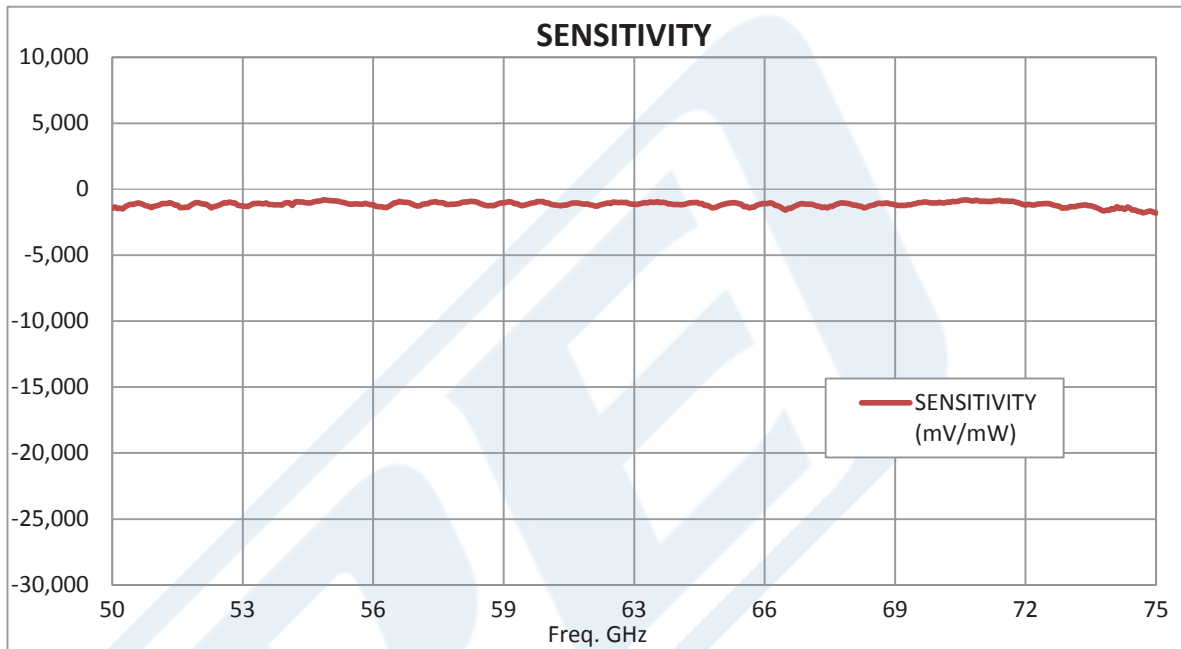


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Typical Performance Data



Zero Biased U Band Waveguide Detector, WR-19, Negative Video Out, 40 GHz to 60 GHz, UG-383/U from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% 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: [Zero Biased U Band Waveguide Detector, WR-19, Negative Video Out, 40 GHz to 60 GHz, UG-383/U PE80T3003](http://www.pasternack.com/zero-biased-u-band-waveguide-detector-wr-19-negative-40-60-ghz-pe80t3003-p.aspx)

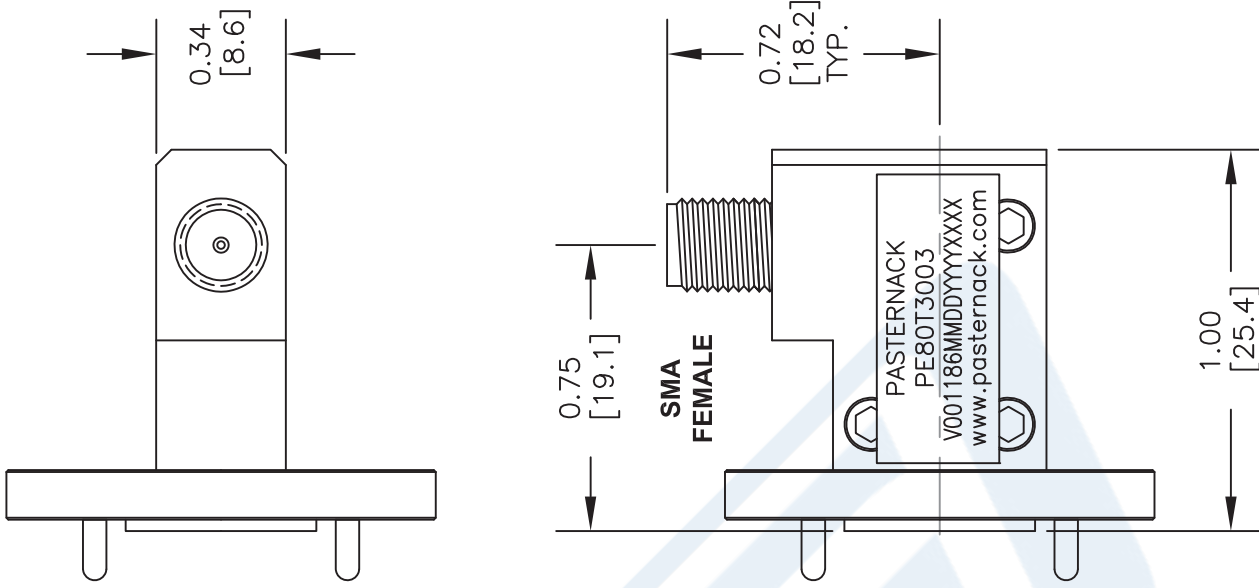
URL: <http://www.pasternack.com/zero-biased-u-band-waveguide-detector-wr-19-negative-40-60-ghz-pe80t3003-p.aspx>

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.



# PE80T3003 CAD Drawing

Zero Biased U Band Waveguide Detector, WR-19, Negative  
Video Out, 40 GHz to 60 GHz, UG-383/U



WR-19 WAVEGUIDE  
W/UG-383/U MOD  
FLANGE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:	
DECIMALS	ANGLES FRACTIONS
.XX ±.01	± 1/2' ± 1/64
.XXX ±.005	
HOLE DIAMETER	TOLERANCE
.0135 TO .125	+0.004/-0.001
.126 TO .250	+0.005/-0.001
.251 TO .500	+0.006/-0.001
.501 TO .750	+0.008/-0.001
.751 TO 1.000	+0.010/-0.001
1.001 TO 2.000	+0.012/-0.001

\* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

DWG TITLE

**PE80T3003**

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].

FSCM NO. 53919

CAD FILE 041515

SCALE N/A

SIZE A

2233

**PE PASTERNAK**  
THE ENGINEER'S RF SOURCE

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