



Waveguide Gunn Oscillator, Center Frequency
 24.125 GHz, Tuning Range 1,000 MHz, Phase Noise
 -98 dBc/Hz, K Band, WR-42 With UG-595/U

Waveguide Gunn Oscillators Technical Data Sheet

PEWGN1001

Features

- Center Frequency 24.125 GHz
- Tuning Range 1.0 GHz
- Phase Noise -95 dBc/Hz
- K Band
- WR-42 UG-595/U Flange

Applications

- Police speed radar guns
- Doppler sensors
- Transceivers

Description

The PEWGN1001 is a Waveguide Gunn Oscillator with a Center Frequency of 24.125 GHz and a Tuning Range of +/- 1.0 GHz. The unit operates in the K Band. The unit has a Phase Noise @ 100kHz Offset of -95 dBc/Hz typ and Frequency Stability of -0.4 MHz/°C max. The Gunn Oscillator has an Output Power of 10 dBm min and Power Stability of -0.04 dB/°C max. The Waveguide Gunn Oscillator uses a Bias Voltage of 5.0 Volts and a Bias Current of 200 mA and has a Waveguide Size of WR-42 and a Flange of UG-595/U.

Electrical Specifications (TA = +25°C, Bias Voltage= 5V, Bias Current= 200mA)

Description	Minimum	Typical	Maximum	Units
Center Frequency		24.125		GHz
Tuning Range	±1000			MHz
Output Power	10			dBm
Frequency Stability			-0.2	MHz/deg C
Power Stability			-0.03	dB/deg C
Phase Noise @ 100kHz Offset		-98		dBc/Hz
Bias Voltage		5		V
Bias Current		200		mA

Mechanical Specifications

Size

Length	0.92 in [23.37 mm]
Width	1 in [25.4 mm]
Height	0.8 in [20.32 mm]
Weight	0.105 lbs [47.63 g]

Configuration

Waveguide Size	WR-42
Flange	UG-595/U
Bias Connector	Pin

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Waveguide Gunn Oscillator, Center Frequency 24.125 GHz, Tuning Range 1,000 MHz, Phase Noise -98 dBc/Hz, K Band, WR-42 With UG-595/U PEWGN1001](#)



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Environmental Specifications

Temperature

Operating Range

-40 to 85 deg C

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

Plotted and Other Data

Notes:

Waveguide Gunn Oscillator, Center Frequency 24.125 GHz, Tuning Range 1,000 MHz, Phase Noise -98 dBc/Hz, K Band, WR-42 With UG-595/U 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.

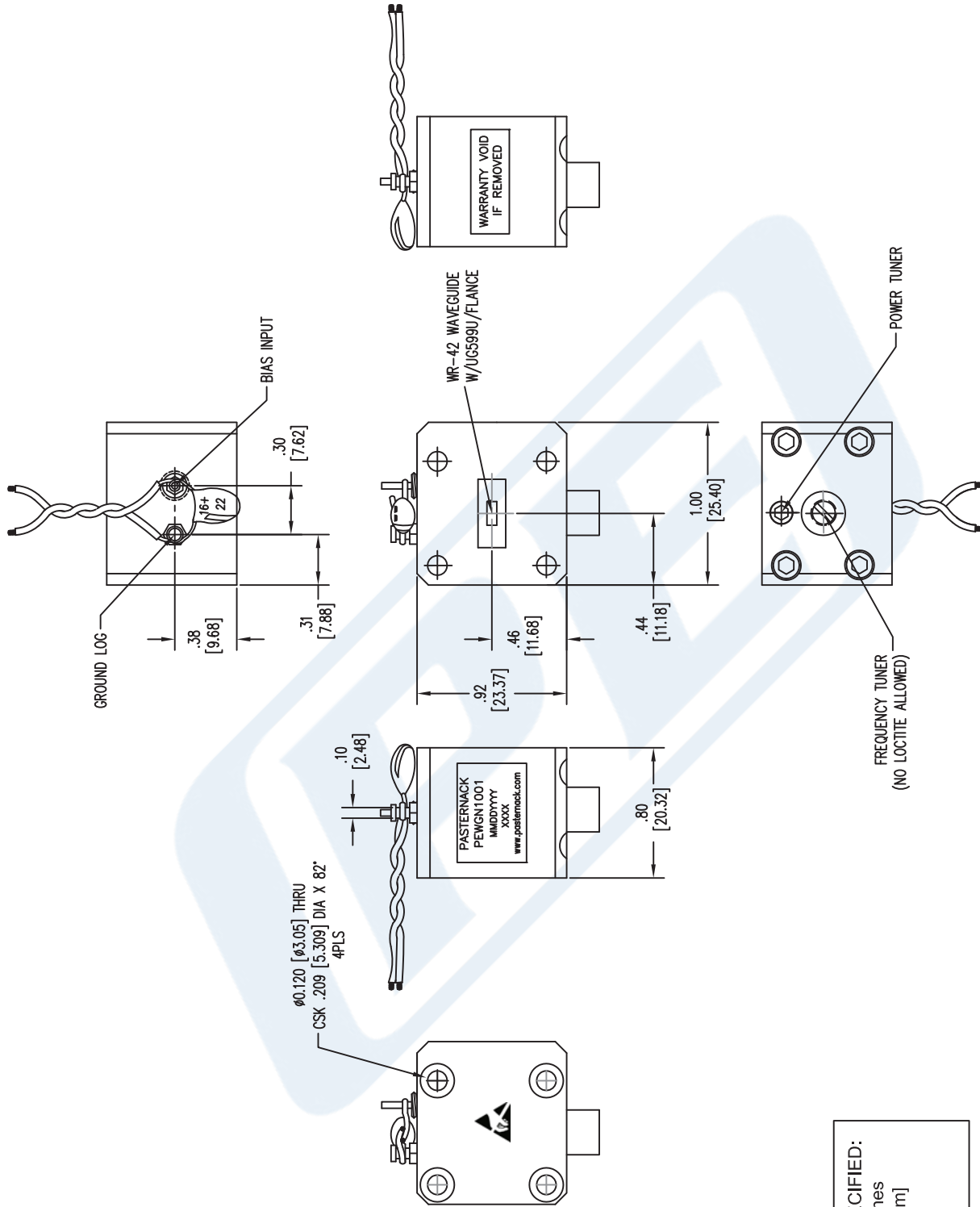
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URL: <https://www.pasternack.com/waveguide-gunn-oscillator-24.125-ghz-tuning-range-1000-mhz-pewgn1001-p.aspx>

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.

PEWGN1001 CAD Drawing

Waveguide Gunn Oscillator, Center Frequency 24.125 GHz, Tuning Range 1,000 MHz, Phase Noise -98 dBc/Hz, K Band, WR-42 With UG-595/U



UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN: inches [mm]
 TOLERANCES ARE: .XX ± .01 [±.25]
 .XXX ± .001 [±.025]

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

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].

DWG TITLE
PEWGN1001

FSCM NO. 53919

SCALE N/A
 SIZE A
 2233

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