

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

FMWGN1001 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	Min	Typ	Max	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

<b>Size</b>	
Length	0.92 in [23.37 mm]
Width	1 in [25.4 mm]
Height	0.8 in [20.32 mm]
Weight	0.1065 lbs [48.31 g]

### Configuration

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

### Environmental Specifications

#### Temperature

Operating Range	-40 to 85 deg C
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#### Environment

ESD Sensitivity	ESD Sensitive Material, Transport material in Approved ESD bags. Handle in approved ESD Workstation.
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**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:



### 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

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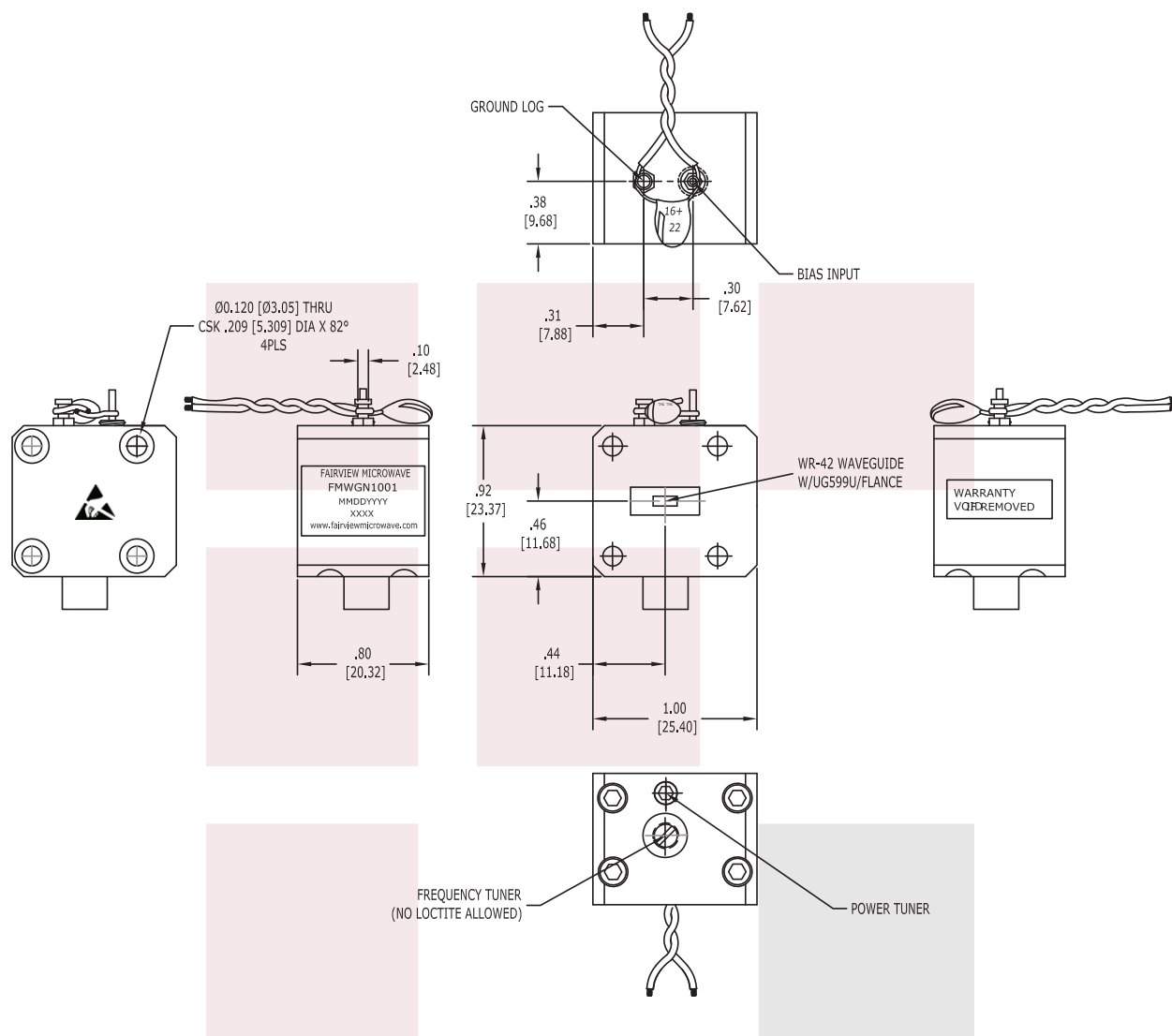
WR-42 Waveguide Gunn Oscillator at a 24.125 GHz Center Frequency With 1,000 MHz Tuning Range And -98 dBc/Hz Phase Noise, Band, UG-595/U from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-42 Waveguide Gunn Oscillator at a 24.125 GHz Center Frequency With 1,000 MHz Tuning Range And -98 dBc/Hz Phase Noise, Band, UG-595/U FMWGN1001](https://www.fairviewmicrowave.com/wr42-waveguide-gunn-oscillator-24.125-ghz-center-frequency-band-ug595-fmwgn1001-p.aspx)

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

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

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TITLE WR-42 Waveguide Gunn Oscillator at a 24.125 GHz Center Frequency With 1,000 MHz Tuning Range And -98 dBc/Hz Phase Noise, Band, UG-595/U		DWG NO <b>FMWGN1001</b>		CAGE CODE <b>3FKR5</b>	
CAD FILE	110615	SHEET	SCALE	N/A	SIZE A 2233