

## Features

- Low Cost
- High-Volume Design
- Various Output Power Levels
- Pulsed DC Input Voltage
- Low-Power Consumption
- FM CW Operation



## Applications

- Intrusion Alarm Systems
- Speed Radar
- Presence Sensing
- Traffic Control
- Level Sensing
- Weather Radar
- Amateur Communications

## Description

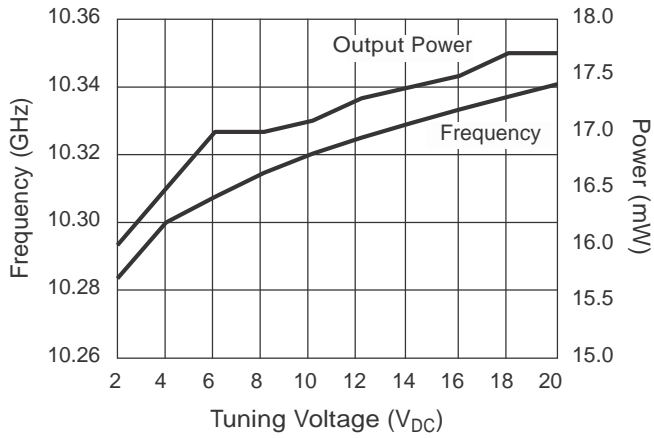
Microsemi's voltage Gunn controlled oscillators are designed to provide an affordable, frequency-modulated microwave power at a discrete frequency. The varactor tuning of the oscillator permits carrier frequency modulation for ranging information.

## Specifications @ 25°C

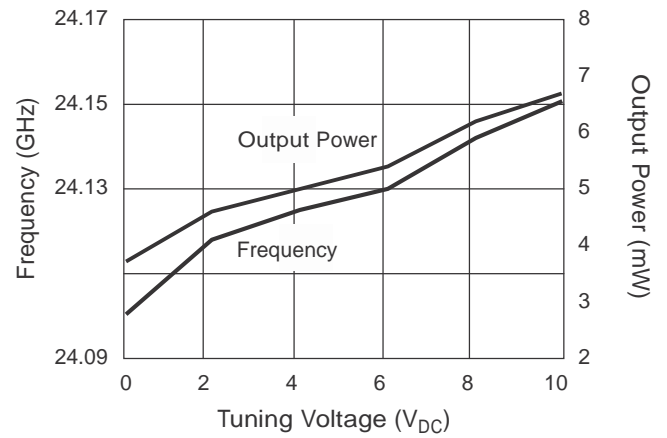
Part Number	Frequency (GHz)	Typ. Output Power (mW)	Freq. Drift/ Temperature (KHz/°C)	Min. Electronic Tuning Range (MHz)	Tuning Voltage (V <sub>DC</sub> )	Operating Voltage (V <sub>DC</sub> )	Max. Operating Current (mA)
<b>X Band Voltage Controlled Oscillators</b>							
MO87108-1	10.300	15	400	40	+1 to +20	+8.0 to +10.0	200
MO87108-2	10.300	25	400	40	+1 to +20	+8.0 to +10.0	600
MO87108-3	10.300	40	400	40	+1 to +20	+8.0 to +10.0	600
MO87603B	9.405	7-25	450	63-100	0 to +13	+10.5	200
<b>K Band Voltage Controlled Oscillators</b>							
MO9070	24.125	3	1000	25	+2 to +10	+5.0	100
MO87828-1	21.500	10	300	40	0 to +15	+5.0 to +8.0	400
MO87828-2	22.100	10	300	40	0 to +15	+5.0 to +8.0	400
MO87828-3	22.700	10	300	40	0 to +15	+5.0 to +8.0	400
MO87828-4	23.300	10	300	40	0 to +15	+5.0 to +8.0	400
MO87827-1	21.500	60	300	30	0 to +10	+5.0 to +8.0	1400
MO87827-2	22.100	60	300	30	0 to +10	+5.0 to +8.0	1400
MO87827-3	22.700	60	300	30	0 to +10	+5.0 to +8.0	1400
MO87827-4	23.300	60	300	30	0 to +10	+5.0 to +8.0	1400
<b>Ka Band Voltage Controlled Oscillators</b>							
MO9405-1	34.000	15	1250	100	+1 to +20	+4.0 to +6.0	350

Other frequencies and power levels available upon request.  
 Operating temperature is -30°C to +70°C.

### Performance Characteristics

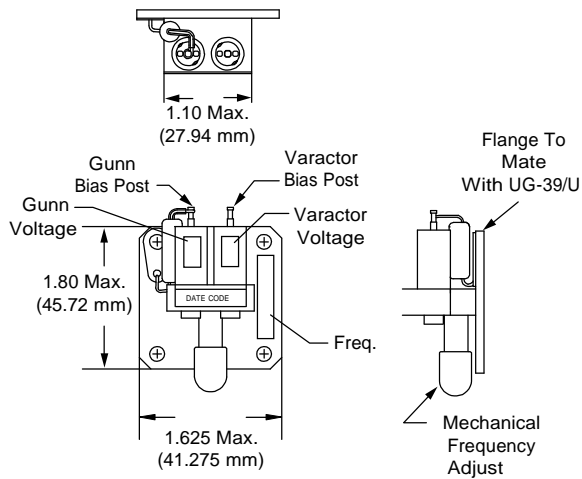


**MO87108 Series VCO**  
**Frequency and Power /Tuning Voltage**



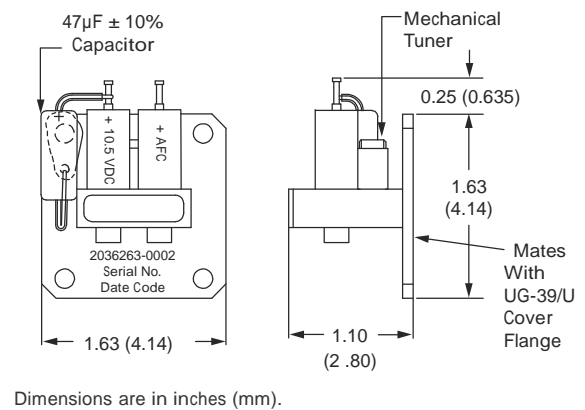
**MO9070 Series VCO**  
**Frequency and Power /Tuning Voltage**

### MO87108

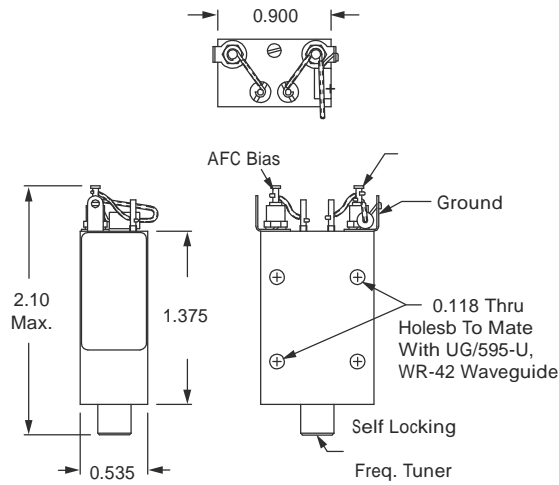


Dimensions are in inches (mm).

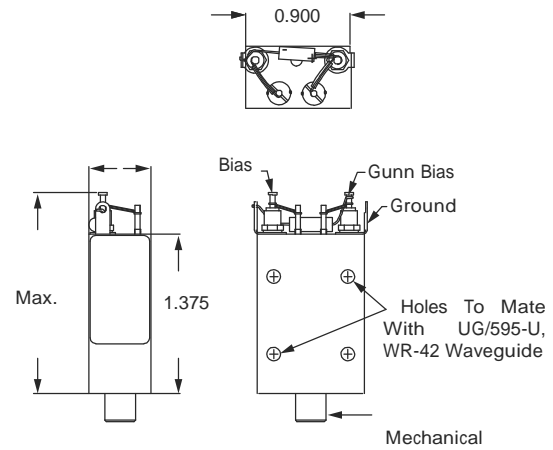
### MO87603B



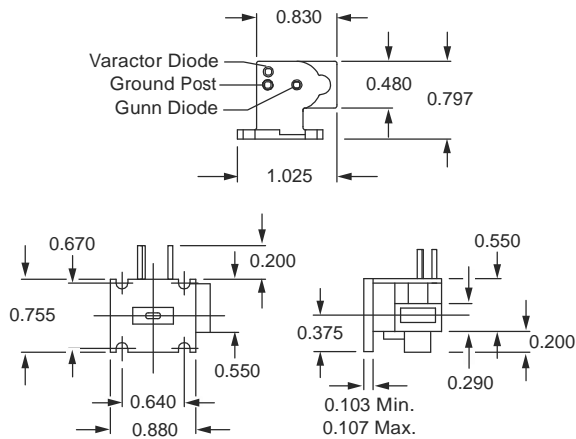
Dimensions are in inches (mm).

**MO87827**


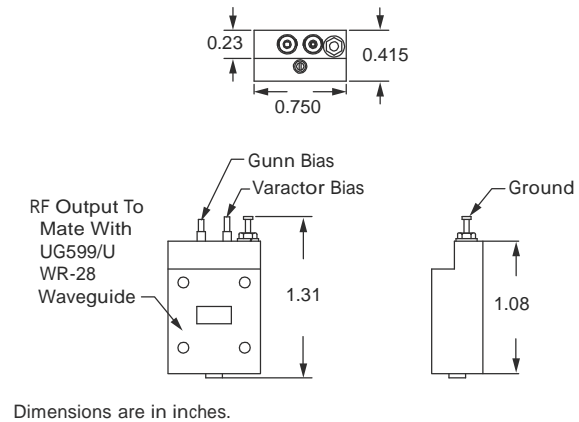
Dimensions are in inches.

**MO87828**


Dimensions are in inches.

**MO9070**


Dimensions are in inches.

**MO9405**


Dimensions are in inches.