

GUNN OSCILLATORS

Fixed Frequency

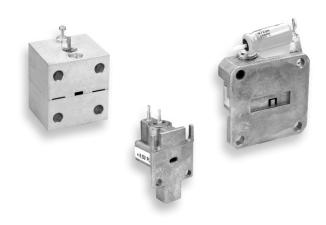
MO8651 - MO9205

Features

- · Low Cost
- · Small Size
- Low Power Consumption
- High-Volume Design
- Pulsed DC Input Voltage Available

Applications

- Speed Radar
- Intrusion Alarm Systems
- · Braking Systems
- Industrial Measurement
- Level Sensing



Description

Microsemi's waveguide output Gunn oscillators are an inexpensive and reliable source of microwave power. The oscillators are designed to suppress spurious signal and harmonic frequencies. Their low-power consumption makes them very useful as local oscillators in microwave receivers.

Specifications @ 25°C

| Part Number | Operating Frequency (GHz) | Output Power (mW) | Typ. Frequency Drift/Temperature (KHz/°C) | Typ. Operating Voltage (V _{DC}) | Max. Operating Current (mA) |
|----------------------|---------------------------------|-------------------------|---|---|-----------------------------------|
| X Band Oscillators | | | <u>. </u> | | |
| MO86751A | 10.525 | 10 Min. | 350 | 8.5 | 200 |
| MO86751B | 10.525 | 25 Min. | 350 | +9.0 to +10.0 | 500 |
| MO86751C | 10.525 | 50 Min. | 350 | +9.0 to +10.0 | 600 |
| MO86751D | 10.525 | 100 Min. | 350 | +9.0 to +10.0 | 800 |
| K Band Oscillators | | | | | |
| MO9060 | 24.125 | 5 Min. | 1000 | 5 | 100 |
| MO86790 | 24.15 | 10–20 | 555 | +3.5 to +6.5 | 250 |
| MO86791 | 24.15 | 40–100 | 555 | +5.0 to +8.0 | 1000 |
| K Band Oscillators – | - Pulsed | | | | |
| MO9080 | 24.125 | 11-20 Peak | 1000 | +6.0 to +7.0 | 300 Peak |
| Ka Band Oscillators | | | | | |
| MO86797 | 35.5 | 15–25 | 1400 | +3.0 to +6.0 | 450 |
| MO9205 | 35.5 | 15–30 | 800 | 5 | 400 |

Other frequencies and power levels available upon request. Operating temperature is -30 $^{\circ}$ C to +70 $^{\circ}$ C. MO9080 pulse width= 10 microseconds duty = 50%.

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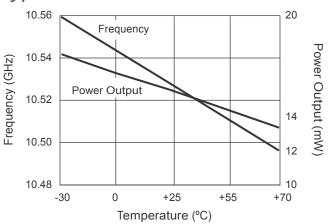


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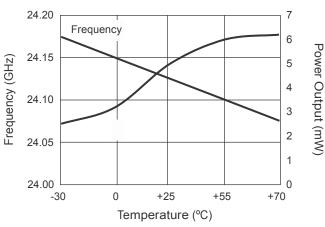
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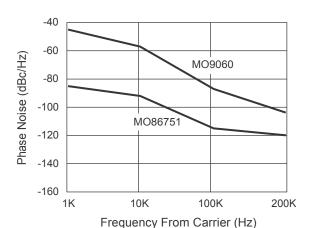
Typical Performance Characteristics



MO86751 Series Frequency and Power vs. Temperature

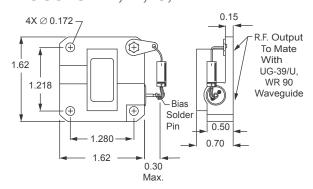


MO9060 Frequency and Power vs. Temperature



MO9060 and MO86751 Series
Typical Phase Noise Performance

MO86751-A, B, C, D



Dimensions are in inches.

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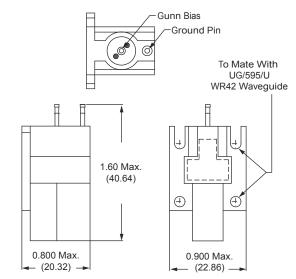


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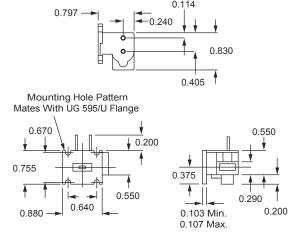
MO8651 – MO9205

MO86790, MO86791



Dimensions are in inches (mm).

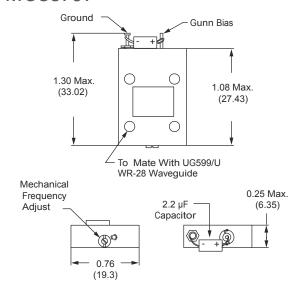
MO9060, MO9080



Dimensions are in inches.

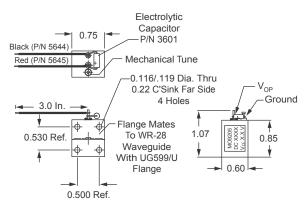
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MO86797



Dimensions are in inches (mm).

MO9205



Dimensions are in inches.