

GUNN OSCILLATORS Voltage Controlled MO87108 - MO9405

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 _{DC})	Operating Voltage (V _{DC})	Max. Operating Current (mA)
X Band Voltage	Controlled Osc	cillators	•	1		-	
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
K Band Voltage	Controlled Osc	cillators					
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
Ka Band Voltag	e Controlled Os	scillators	•	1		•	
MO9405-1	34.000	15	1250	100	+1 to +20	+4.0 to +6.0	350

Other frequencies and power levels available upon request.

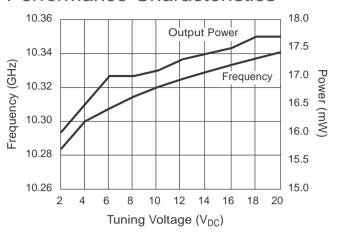
Operating temperature is -30°C to +70°C.

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Performance Characteristics

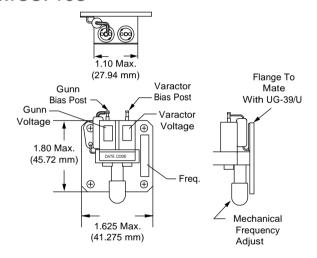


MO87108 Series VCO Frequency and Power /Tuning Voltage

24.17 8 7 Output Power (mW) 24.15 Frequency (GHz) 6 Output Power 24.13 5 Frequency 3 24.09 2 10 Tuning Voltage (V_{DC})

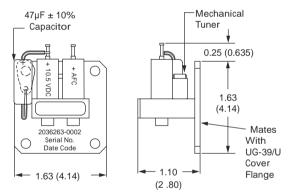
MO9070 Series VCO Frequency and Power /Tuning Voltage

MO87108



Dimensions are in inches (mm).

MO87603B



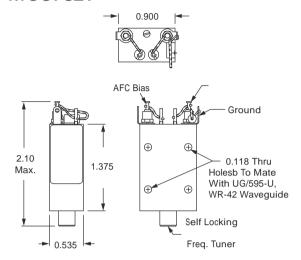
Dimensions are in inches (mm).

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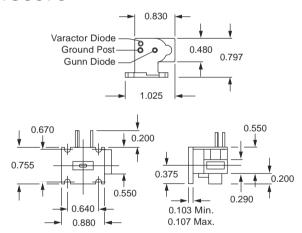
GUNN OSCILLATORS Voltage Controlled MO87108 - MO9405

MO87827



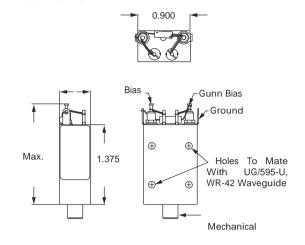
Dimensions are in inches.

MO9070



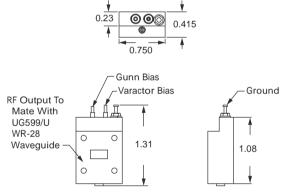
Dimensions are in inches.

MO87828



Dimensions are in inches.

MO9405



Dimensions are in inches.

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