

Gunn Oscillator

35.5 GHz

MA86797

V3.00

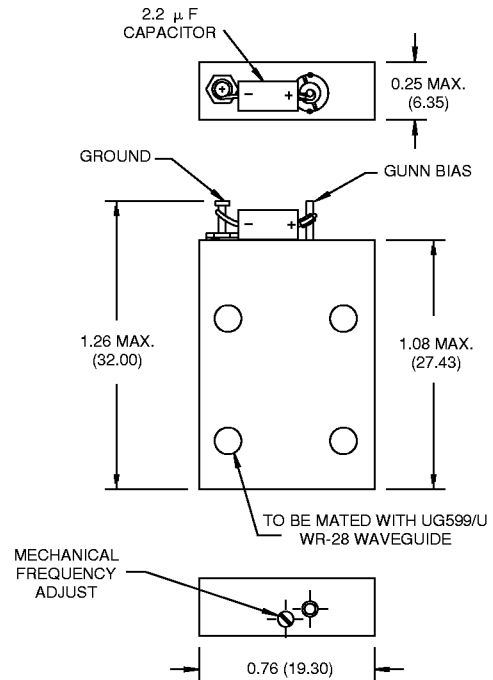
Features

- Low Cost Ka-band Gunn Oscillator
- Frequency 35.5 GHz
- 10 mW Minimum Output Power
- Low Phase Noise for Doppler Measurements
- Rugged Mechanical Construction for Industrial Environments

Description

The MA86797 waveguide cavity Gunn oscillator is useful as a reliable low noise inexpensive source of microwave power for Ka-band. It provides 10 mW minimum power at 35.5 GHz and its low AM and FM noise makes it attractive for sensitive traffic speed radars. Alternate frequencies and output power levels are available upon request.

The MA86797 Gunn oscillator is useful for low noise local oscillators/transmitters for Ka-band police speed radars.



Dimensions in () are in mm.
Case is electrical ground.

Specifications @ 25°C

Parameter	Symbol	Units	Specification
Frequency (Mechanical Tuning) ¹	F	GHz	35.500 ±25 MHz
Power Output	P _{OUT}	mW	10 Min., 20 Max.
Voltage Operating Range (Gunn) ²	V _{OP} /GUNN	VDC	+3.0 to +6.0 Fixed
Operating Current (Gunn)	I _{OP}	mA	450 Max.
Startup Current (Gunn)	I _{TH}	mA	550 Max.
Change Frequency vs. Temperature ³	ΔF/ΔT	MHz	70 Max.
Recommended Output Load Parameter	LOAD (SWR)	SWR	1.5:1 Max., All Phases
Operating Temperature Range (Ambient) ³	T _{OP}	°C	-30 to +70
Waveguide Size/Flange			WR-28, UG-599/U

1. Factory tunable over a small frequency range around 35.5 GHz (contact factory).

2. The operating voltage is factory specified and marked on each oscillator. The power supply tolerance is ±0.25 V.

3. The ambient temperature is defined as air temperature.

4. A 2.2 microfarad capacitor is supplied to reduce bias line oscillation.

Specifications Subject to Change Without Notice.

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