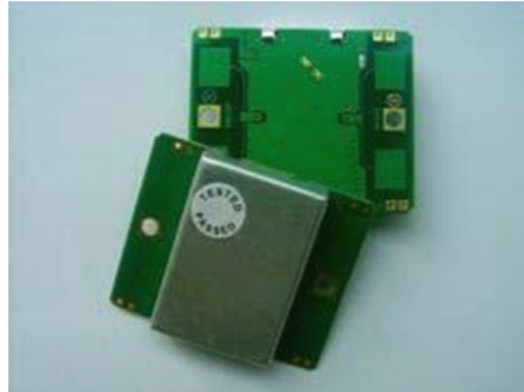
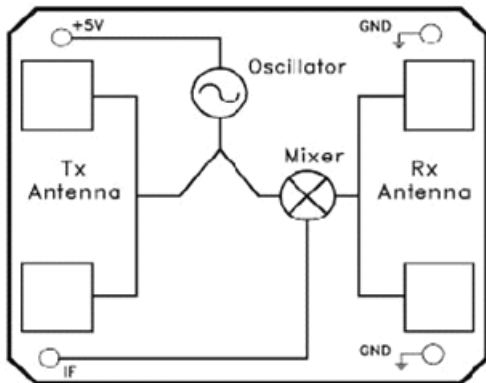


GH100 microwave movement sensors X-band transceiver, by the media oscillator (DRO) and a pair of micro strip antenna, microwave frequency 10.525Ghz, for mobile detection equipment. And passive infrared sensors (PIR) complex to use, can effectively reduce the false positive rate of target detection can also be used to measure vehicle speed.

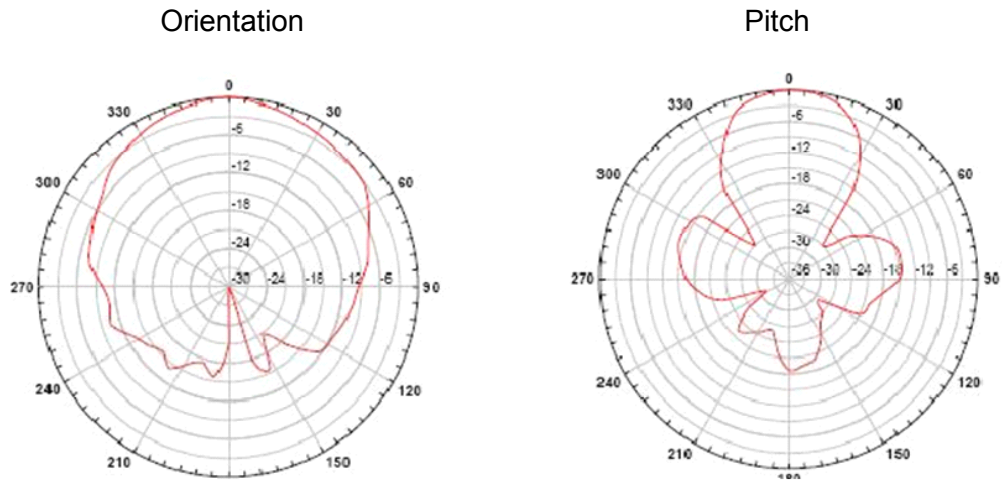
Principles and product diagram:



Features:

- Low power consumption
- CW / pulse operating mode
- Planar structure
- Low harmonic wave radiation
- Uses:
- Microwave and infrared motion detection
- Measurement of vehicle speed
- Lighting controls, automatic body sensing control

Antenna

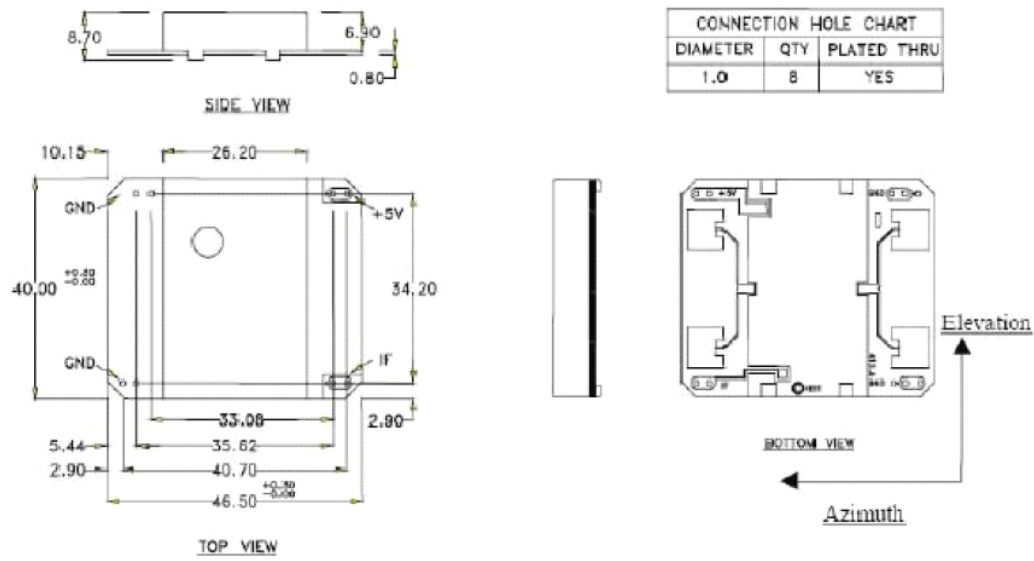


Main parameters:

All parameters' measuring conditions: +5 VDC, in continuous wave operation mode, 12 k Ω load, +25 °C ambient temperature.

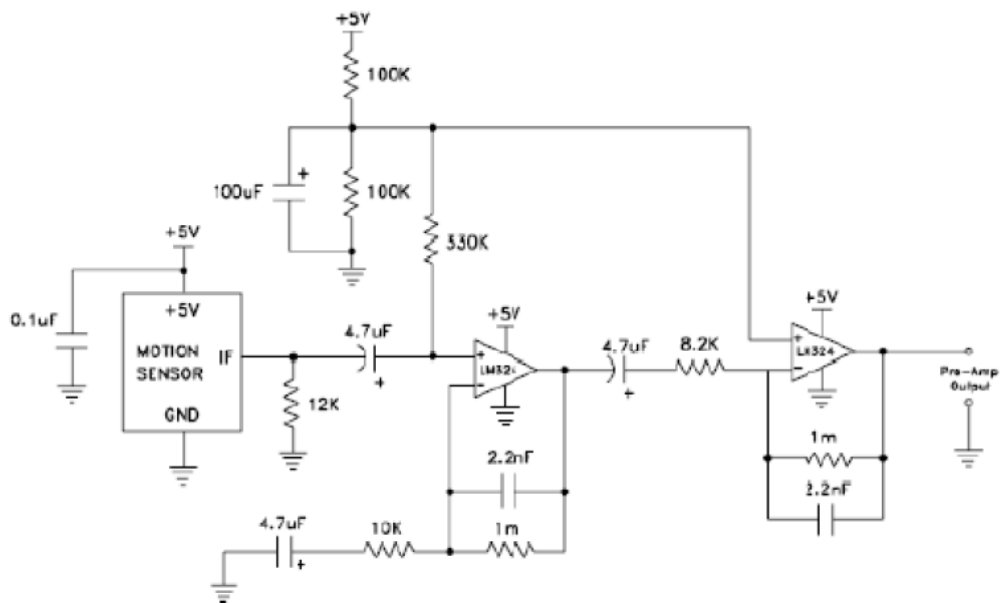
Parameter	Minimum	Typical	Maximum	Unit
Center frequency	10.520	10.525	10.530	GHz
Radiated power (EIRP)	10	13	14	dBm
Clutter suppression			-30	dBm
Setup time		3	6	μ Sec
Received Signal Strength		140		μ Vp-p
Noise output			3	μ Vrms
3dB antenna pattern - directions		80		°
3dB antenna - Pitching		40		°
Supply voltage	4.75	5.00	5.25	VDC
Supply Current		30	40	mA
Pulse repetition frequency		2		KHz
Pulse width	10			μ Sec
Operating Temperature	-15		55	°C
Weight		17		

Outline Diagram (in mm)



Application Circuit:

Annex 1: Amplifier Circuit (CWoperation)



Annex 2: Amplifier Circuit (Pulse operation, PRF = 2KHz, Duty Cycle = 4%)

