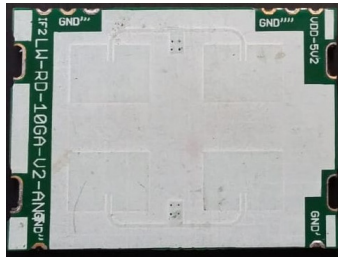


LWRD10GAM Radar Module

Subject to change without prior notice

Rev 0.1, July, 2018



1.0 Introduction

LWRD10GAM is a miniature transceiver radar module using X-Band microwave frequency. Its unique frequency-stabilized radar Doppler circuit make it ideal for stable and precise motion detection applications over a wide temperature range. Its advanced antenna design offers a well-defined and precise detection beamig angles. It operates in CW mode.

This module is ideally suitable for intruder or occupancy detection with minimum level of false alarm. It can also be used for auto-door opening in both indoor or outdoor environments and vehicle or object speed measurement.

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2.0 Features

- Low cost
- CW operation
- Low current consumption
- 3M detection range
- Small size
- Highly stable
- High sensitivity
- Precise detection coverage
- Integrated IF amplification and detection circuitries
- Minimum number of external components
- IF, analog and digital outputs

3.0 Applications

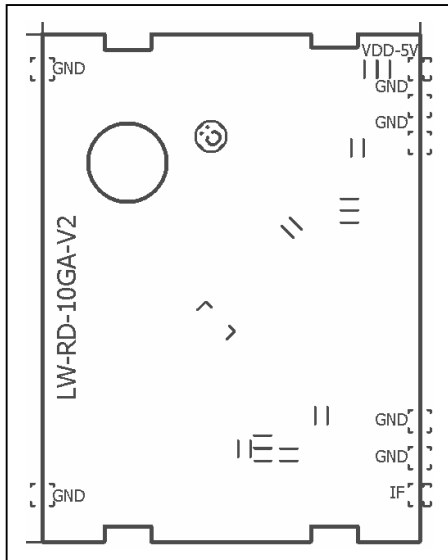
- Motion detector
- Occupancy detector
- Speed measurement
- Lighting control
- Auto-door opener

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4.0 Pin Description



Pin Name	Description
IF	IF output
VDD	Power Supply (5V)
GND	Ground

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5.0 Electrical Characteristics

5.1 General

Parameter	Value	Units
Frequency	10.525	GHz
Operating voltage (Vcc)	3.5 to 5	V
Dimensions	35 x 26 x 7	mm
Operating temperature	-10 to +55	°C

5.2 Electrical Characteristics

Parameter	Value	Units
Frequency accuracy	10	MHz
TX output power	13	dBm EIRP
Operating current	35	mA
Harmonic emission	< -7.3	dBm
Sensitivity (10dB S/N)	-85	dBm
Antenna gain	6	dBi
Detection Digital output (Logic High)	Vcc	V
Detection Digital output (Logic Low)	0	V

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6. IMPORTANT NOTICE

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