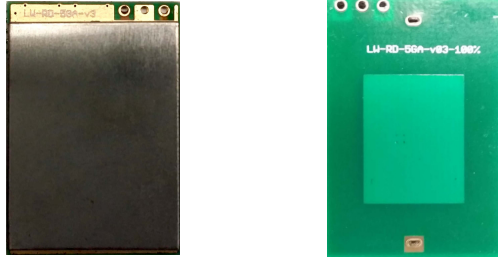


LWRD5G8M Radar Module

Subject to change without prior notice

Rev 0.1, July, 2018



1.0 Introduction

LWRD5G8M is a miniature transceiver radar module using ISM microwave frequency. Its unique radar Doppler circuit make it ideal for low-cost and precise motion detection applications over a wide temperature range. 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
- High sensitivity
- Precise detection coverage
- Integrated IF amplification and detection circuitries
- Minimum number of external components
- IF analog output

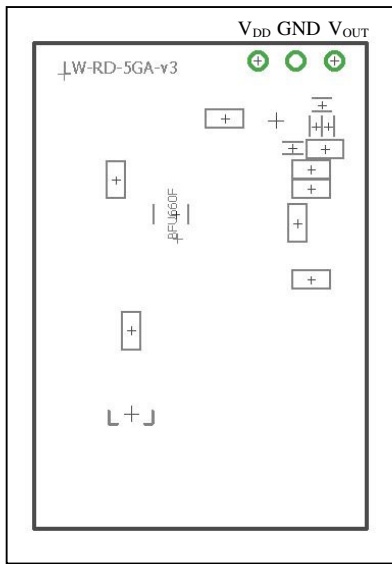
3.0 Applications

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

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4.0 Pin Description



Pin Name	Description
V _{OUT}	Output
V _{DD}	Power Supply (5V)
GND	Ground

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5.0 Electrical Characteristics

5.1 General

Parameter	Value	Units
Frequency	5.8	GHz
Operating voltage (Vcc)	4 to 5	V
Dimensions	31.6 x 21.6 x 4.3	mm
Operating temperature	-10 to +55	°C

5.2 Electrical Characteristics

Parameter	Value	Units
Frequency accuracy	50	MHz
TX output power	13	dBm EIRP
Operating current	35	mA
Harmonic emission	< -7.3	dBm
Antenna gain	2	dBi
IF output	0 – 100	mVac

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6. IMPORTANT NOTICE

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