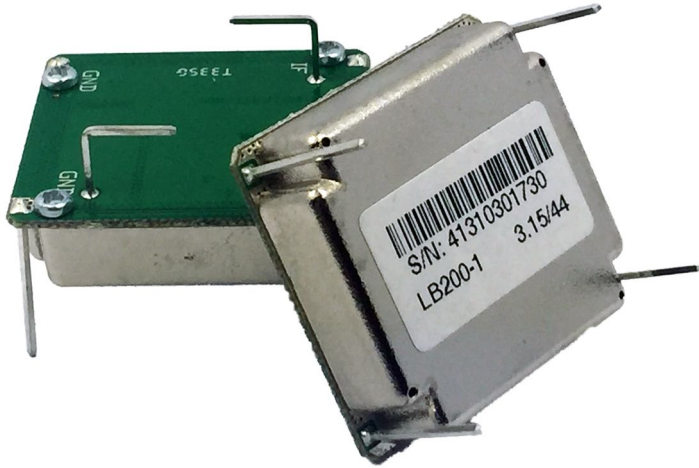


LB200

Ceiling Mount C-band Microwave Sensor



Features:

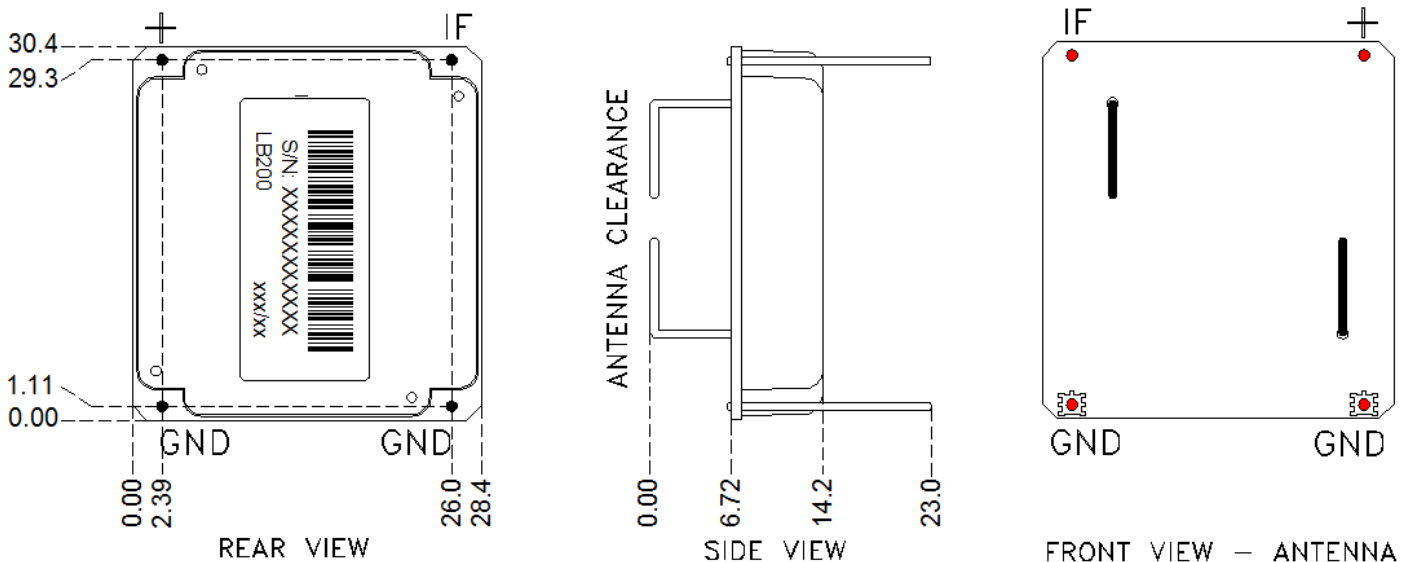
- Omni-directional detection pattern
- Small profile
- Low current consumption

Applications:

- Motion detection
- Lighting control
- Security alarm

The LB200 C-band microwave sensor is a bi-static Doppler transceiver with a coaxial resonator oscillator, a single balanced mixer and monopole antennas. It is suitable for ceiling mounting in security and lighting control applications.

Module Outline



All dimensions are in mm.

Name	Description
+	+5 V _{DC} input
IF	IF output
GND	Ground

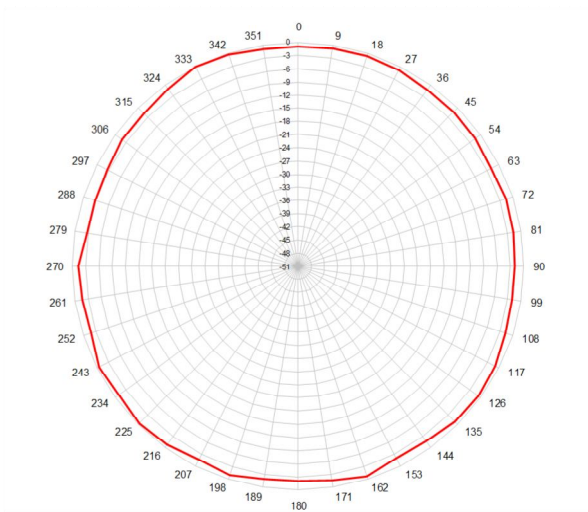
Note 1: Complies with EN 300 440.

Note 2: Complies with FCC Part 15.249.

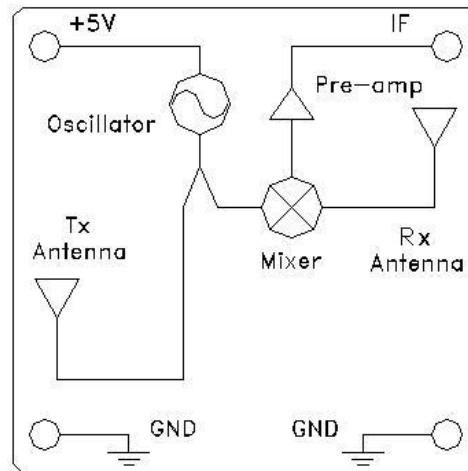
Note 3: **CAUTION: ELECTROSTATIC SENSITIVE DEVICE.** Observe precautions for handling and storage.



Antenna Beam Pattern



Block Diagram



Technical Specifications

Unless noted otherwise, the specifications are measured in CW mode, $V_{IN} = +5 V_{DC}$ and 12k ohm load at +25°C.

Parameter	Remarks	Min	Typical	Max	Units
Operating Conditions					
Supply voltage, V_{IN}		4.75	5	5.25	V_{DC}
Current consumption			30	40	mA
Operating temperature		-40		85	°C
Recommended Pulse Scheme					
Pulse frequency	LB200-2 only		2		KHz
Duty cycle	LB200-2 only		2		%
Transmitter					
Operating frequency	LB200-1	5.75	5.8	5.85	GHz
	LB200-2	5.75	5.8	5.85	GHz
Radiated power (EIRP)		5	7	10	dBm
Spurious emission				-30	dBm
Receiver					
IF amplifier bandwidth	LB200-1 only		4-900		Hz
IF amplifier gain	LB200-1 only		33		dB
Physical Properties					
Dimensions			30.4×28.4×23.0		mm
Weight			7		g