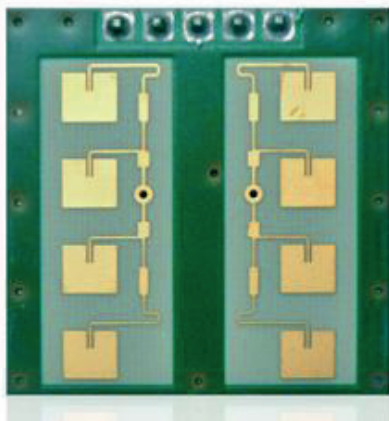


DATA SHEET



Radar transceiver

Description



Characteristic features

- radar-based motion detector working in the 24GHz - ISM - Band
- advanced LCO-oscillator with low current consumption
- split transmit and receive path for maximum gain
- dual channel operation for direction of motion identification
- speed measurement

Applications

- Door Openers
- Security Applications
- Industrial Applications

Performance

- Movement
- Velocity
- Direction

Features

The RSM2650 radar sensor is a version with LCO-oscillator and therefore the perfect choice for low cost applications where the detection of movement direction is necessary as well as the detection of range.

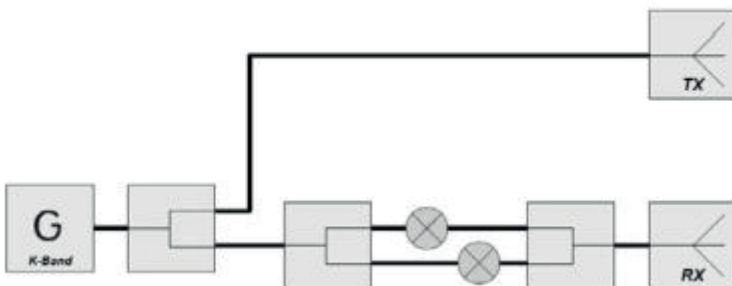
Technical data

Radar transceiver	
Operating temperature	-20...+60 °C
Supply current	30 mA (max. 40 mA)
Supply voltage	5 V (min. 4,75, max. 5,25 V)
Side-lobe suppression	horizontal 12 dB vertical 13 dB
full beam width @ -3 dB	horizontal 80 ° vertical 35 °
IF-amplifier	bandwidth: no IF-amplifier included
IF-output	offset -300...300 mV
output power (EIRP)	16 dBm
temperature drift (frequency)	-1 MHz/ °C
Transmit frequencies	24.000-24.250 GHz
RoHs	RoHs 2002/95/EG compliant
Articleno.	0392 0003

PIN assignment

PIN	Description	IN/OUT	Comment
1	NC	input	not connected
2	V _{CC}	input	supply voltage (5 V)
3	IF1	output	Signal 1
4	GND	input	Analog ground
5	IF2	output	Signal 2

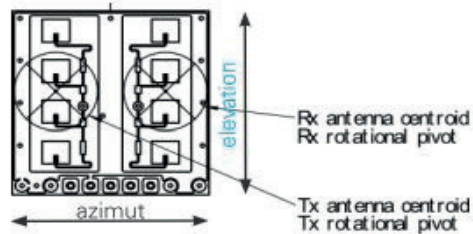
BLOCK DIAGRAMM



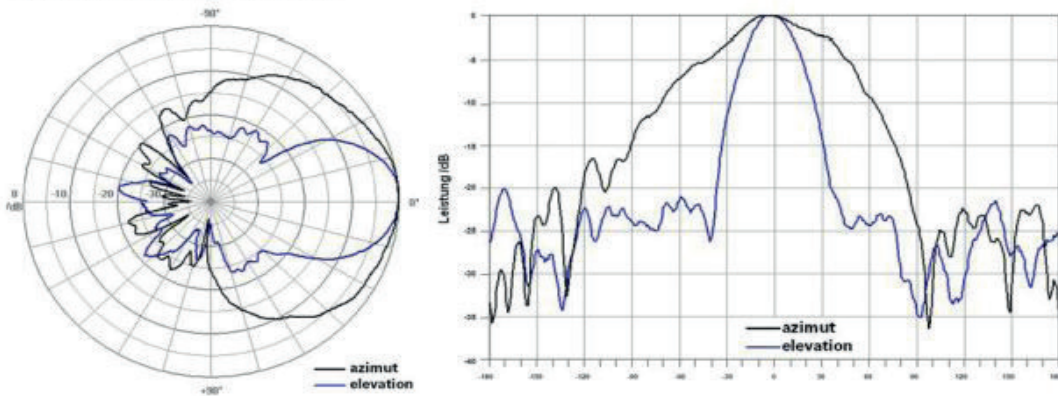
DATA SHEET

Radar transceiver

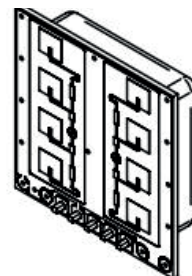
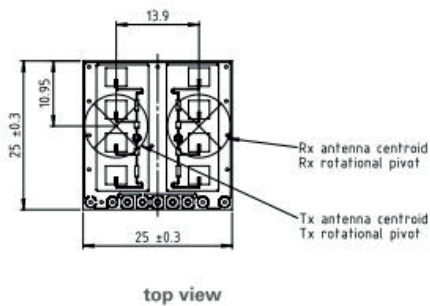
ANTENNA ORIENTATION:



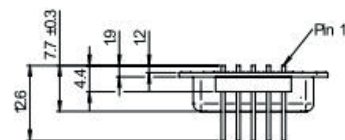
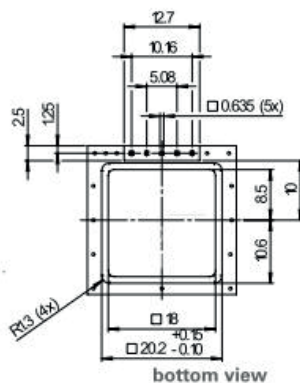
TX / RX-ANTENNA PATTERN:



Dimensions



isometric view



side view