

Motion Detector Module  
WR-42, K Band

Microwave Products  
Preliminary 20 August 09

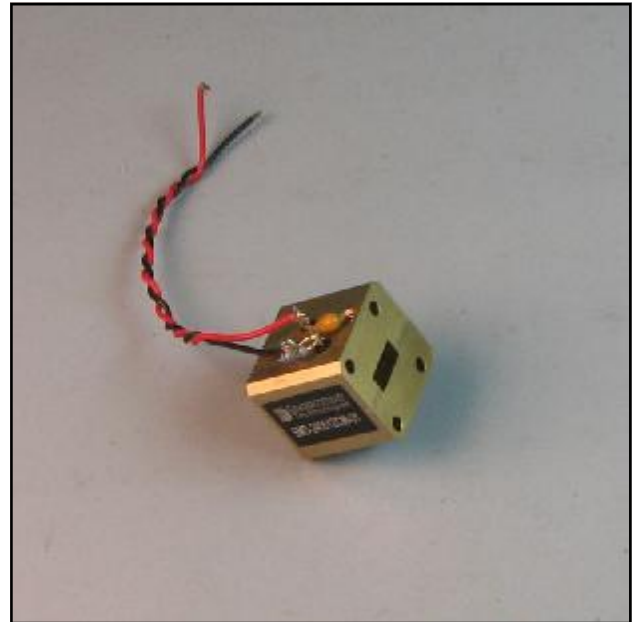
## Features

- High Reliability
- High Sensitivity
- Low harmonic emission
- Compact size
- Low cost and volume production
- Meets FCC, PTT, FTZ and DTI regulations

## Applications

- Intrusion Alarm
- Automatic door opener
- Speed measurement
- Contactless vibration measurement
- Traffic signal actuator
- Automatic illumination system

## Outline Drawing



## Electrical Specifications: $T_c = 25 \pm 5^\circ\text{C}$ (Room Ambient)

| Parameter                               | Min    | Typ | Max | Units |
|---|--------|-----|-----|-------|
| Frequency Range, Transmitter            | 24.15  |     |     | GHz   |
| Transmitter Output Power                | 4      | 5   |     | dBm   |
| Frequency Range, IF                     | DC—100 |     |     | MHz   |
| Conversion Loss, Receiver               |        | 12  | 14  | dB    |
| Detector Voltage into 2 K $\Omega$ Load | 0.1    | 0.3 |     | V     |
| Supply Voltage                          | 4.5    |     | 5.5 | V     |
| Supply Current                          |        | 200 | 300 | mA    |

## Absolute Maximum Ratings at 25°C

|                       |                    |
|-----------------------|--------------------|
| Supply Voltage        | +6 V <sub>DC</sub> |
| Operating Temperature | 0 to +50 °C        |
| Storage Temperature   | -65 to +200 °C     |