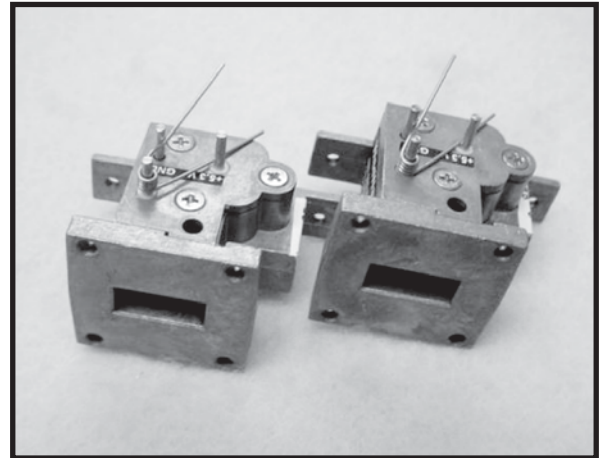


**FEATURES**

- ❖ High reliability
- ❖ High sensitivity
- ❖ CW and pulse operation
- ❖ Low harmonic emission
- ❖ Compact size
- ❖ Low cost and volume production
- ❖ Meet FCC, PTT, FTZ and DTI regulations

**APPLICATIONS**

- ❖ Intrusion alarm
- ❖ Automatic door opener
- ❖ Speed measurement
- ❖ Contact less vibration measurement
- ❖ Traffic signal actuator
- ❖ Automatic illumination system


**SMD Series**
**DESCRIPTION**

**SMD series K band Motion Detector Modules** are designed for **short-range** motion/speed detection where the cost is essential. The modules are constructed with a T/R diplexer, a single ended mixer and a frequency and power adjustable Gunn diode oscillator. The module uses the low cost die-cast housing to further reduce the manufacturing cost while maintain a ridged mechanical configuration. The integrated design offers compact size and ease system integration. The dual channel version is available per request.

**SPECIFICATIONS**

Typical Specifications		
Parameters	CW (Model No.: SMD-240912CW-02)	Pulse (Model No.: SMD-240912PS-02)
RF frequency	24.150 GHz	24.150 GHz
Transmitter output power	+8.5 dBm (typical)	+8.5 dBm (typical)
Receiver conversion loss	12 dB (typical)	12 dB (typical)
IF bandwidth	DC to 100 MHz (minimum)	DC to 100 MHz (minimum)
Operation Voltage	4.5 to 5.5 Vdc	6 to 8.5 Vdc, 2% Duty Cycle
Operating Current	90 to 160 mA	N/A
Detector Voltage	0.3 (Volts) into 2 K-ohm Load	0.3 (Volts) into 2 K-ohm Load
$\Delta F/\Delta T$	-0.50 MHz/°C (maximum)	-0.50 MHz/°C (maximum)
$\Delta P/\Delta T$	-0.04 dB/°C (maximum)	-0.04 dB/°C (maximum)
Operation temperature	-40 to +85 °C	-40 to +85 °C
Storage temperature	-50 to + 90 °C	-50 to + 90 °C