



T & C INTERNATIONAL

MRO8700

USER MANUAL

MRO8700

禾畚興業有限公司

台北市信義區 110 基隆路二段 48 號 6 樓

6F, 48, KEELUNG ROAD, SEC. 2, TAIPEI 110, TAIWAN, R.O.C.

TEL: 886-2-2758-6911 FAX: 886-2-2758-7342 E-MAIL: tncintl@ms35.hinet.net



General Description

Microwave motion sensor is applying Doppler radar phenomenon to sense motion. It transmits a low power microwave and receives energy reflected by objects. If the movement of the object is detected by the microwave motion sensor, the reflected microwave frequency is shifted away from the transmit frequency. The shifted microwave is mixed with the transmit microwave and results a low frequency voltage at the output of the sensor.

MRO8700 is a reliable and low cost solution with compact size that can be integrated in smaller products.

Features

- Environmentally insensitive
- Un-affected by heat, ambient noise, humidity, airflow, dust. Suitable for harsh environment
- Non-intrusive
 - “See-through” non-metallic material, e.g. wood, plastic, glass, brick. It can be concealed or totally enclosed to prevent vandalism
- Long range

Applications

- Automatic door activation
- Intrusion alarms
- Non-contact measurement
- Obstruction warning systems
- Sensor lights

禾畚興業有限公司

台北市信義區 110 基隆路二段 48 號 6 樓

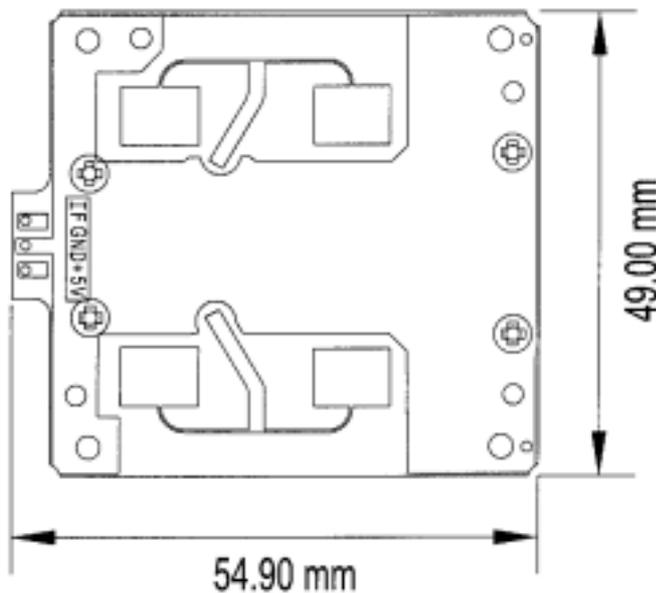
6F, 48, KEELUNG ROAD, SEC. 2, TAIPEI 110, TAIWAN, R.O.C.

TEL: 886-2-2758-6911 FAX: 886-2-2758-7342 E-MAIL: tncintl@ms35.hinet.net



Electrical Characteristics

Parameters	Min.	Typ.	Max.	Unit	Condition
Frequency	10525 +/- 12.5			MHz	Over temp.
Power Output	10	12	14	dbm	
Operating Voltage	4.75	5	5.25	V	
Operating Current	30	50	65	mA	cw
Sensitivity (10dB S/N ratio)		-85		dbm	3Hz to 80Hz
Noise		10		μV	3Hz to 80Hz
Antenna Gain		8		db	
Size	55×49×12.5			mm	
Power/Temp. Coefficient	3			dbm	Over operating
Operating Temperature Range	-20 to +55				
Storage Temperature Range	-30 to +70				
Pulse Operation:					
Average Current @5 % Duty Cycle	2			mA	
Pulse Width	5 μ sec. min.				
Duty Cycle	1 % min.				



木畚興業有限公司

台北市信義區 110 基隆路二段 48 號 6 樓



Caution:

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

禾畚興業有限公司

台北市信義區 110 基隆路二段 48 號 6 樓

6F, 48, KEELUNG ROAD, SEC. 2, TAIPEI 110, TAIWAN, R.O.C.

TEL: 886-2-2758-6911 FAX: 886-2-2758-7342 E-MAIL: tncintl@ms35.hinet.net