

HM 612 Digital 6Pins Long Range Human Motion Detector PIR Sensor for Smart Light Switch (ROBU SKU: 815423)

1. Maximum Ratings

Characteristics	Symbol	Min. Value	Max. Value	Unit	Remarks
Working Temperature	TST	-20	85	°C	
Max. Current	Into	-100	100	mA	
Storage Temperature	TST	-40	125	°C	

2. Working Conditions (T=25°C, VDD=3V , Except other requirements)

Characteristics	Symbol	Min.	Type	Max.	Unit	Remarks
Supply Voltage	VDD	2.2	3	3.7	V	IR=0.5mA
Working Current	IDD	9	9.5	11	μA	
Sensitivity threshold value	VSENS		80		μV	
Output REL						
Output Low Current	IOL	10			mA	VOL<1V
Output High Current	IOH			-10	mA	VOL>(VDD-1V)
Output Low current Lock time	TOL		2		s	Non-adjustable
Output High current Lock time	TOH	2		3600	s	
Input SENS/ONTIME						
Voltage Input Range		0		VDD	V	0V to ¼ VDD
Input Bias Current		-1		1		

OEN						
Input Low Voltage	VIL			0.3	V	OEN Threshold Value From High Voltage to Low Voltage
Input High Voltage	VIH	1.5			V	OEN Threshold Value From High Voltage to Low Voltage
Input Current	II	-1		1	μA	$V_{SS} < V_{IN} < V_{DD}$

Oscillator & Filter

Low pass filter cut-off frequency				7	Hz	
High pass filter cut-off frequency				0.44	Hz	
Oscillator frequency on Chip	FCLK			64	kHz	

Interior Block Diagram

