



PIR Detectors

ITV-P-KC778B

PIR Controller
Low cost Version



20 pin DIP



20 pin SOIC

Description

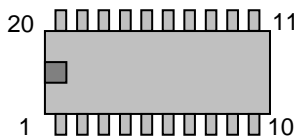
This Master PIR Control Chip has been designed for easy implementation of AC control functions that use a Passive Infra-Red (PIR) motion detector. Due to its high sensitivity and reliability, it is also widely used in security products.

Please ask for detailed datasheet

Features

- Minimum external component
- High sensitivity
- High RFI immunity
- Daylight adjustment
- Off delay timer

Pin Assignemnt



Pin	Name	Description
1	VCC	Supply Voltage (5V)
2	Sensitivity	PIR Motion Sensitivity Input
3	Offset Filter	PIR Motion Offset Filter
4	Anti-Alias	PIR Anti-Alias Filter
5	DC-CAP	PIR Gain Stabilization Filter
6	VReg	Voltage Regulator Output
7	Pyro (D)	Pyro Drain Reference
8	Pyro (S)	Pyro Source Input Signal
9	GND (A)	Analog Circuitry Ground
10	GND (D)	Digital Circuitry Ground
11	Daylight Adj.	Adjustment and CdS Input
12	Daylight Sense	Silicon Photo Diode Input
13	Gain Select	PIR Gain Select Tri-State Input
14	ON/AUTO/OFF	Mode Select Tri-State Input
15	Toggle	Mode Select Toggle Input
16	OUT	Lights ON/OFF Input
17	LED	PIR Motion Indicator Output
18	C	OFF Timer Oscillator Input
19	R	OFF Timer Oscillator Output
20	FRef	Frequency Ref. Oscillator

Operation Data

Value	min.	typ.	max.
V _{CC} [V]	4	5	15
I _{CC} [mA]		0,3	
Input Voltage on any pins [V]	GND -0.5		V _{CC} +.05
PIR Power Supply Rejection Ratio [dB]	74		
PIR Input Gain [dB]	62		68
Overall Gain Variation [%]			5
Overall Threshold Variation[%]			7
Pin 7 Reference Voltage [V]	2,3	2,5	2,7
Pin 11 Pull Down Current [µA]		5	
Pin13 Pull-Up Current [µA]		5	
Pin14 Pull-Up Current [µA]		10	
Pin 15 Pull-Down Current [µA]		10	
Pin 16 Output Impedance [Ω]			35
Pin 17 Output Impedance [Ω]	375	500	625
Pin19 Output Impedance [Ω]	30	40	50
Operating Temperature	-25		+100
Storage Temperature	-55		+125