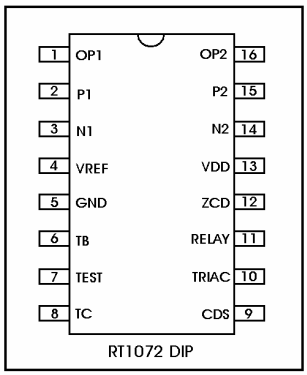
Description:

RT1072 is a PIR(Passive Infra-Red)controller,The PIR controller can sense the motion movement and activate the electronic application. The interstracture of the PIR controller IC is using The analog mixing digital technique to design,It is proven to be very stable in any circumstances. It can be either drive TRIAC or RELAY depending on users' Choice。The application circuit is very cost effective。

Features :

Mixed-ModeE COMS IC.
High noice immunity.
Constant current CDS input.
PIR input.
Adjustable output duration.
Drive either RELAY OR TRIAC.

Pin Out :



RT1072 DIP

Absolute Maximum Rating:

Symbol	Parameter	Condition	Rating	Unit
V_{DD}	Supply voltage		-0.3 ~ 6	V
V_I	Input voltage		-0.3 ~ VDD+0.3	V
V_O	Output voltage		-0.3 ~ VDD+0.3	V
P_{dis}	Max. Power Dissipation	VDD=5V	300	mW
T_{OP}	Operating Temperature		-20 ~ 70	℃
T_{st}	Storage Temperature		-50 ~ 125	℃

Electrical Characteristics:

VDD = 5 V , Temp = 25 ℃

Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{DD}	Supply voltage		4	5	5.5	V
V_{ref}	Regulated Voltage	VDD=5V	3	3.4	3.8	V
$V_{IH\ (CDS)}$	CDS Input High Voltage	VDD=5V	1.3	1.7	2.2	V
$V_{IL\ (CDS)}$	CDS Input Low Voltage	VDD=5V	0.6	0.9	1.1	V
I_{dd}	Operating Current	No Load, OSC on	100	150	200	μA
I_{SB}	Stand By Current	No Load, OSC off		40	60	μA
I_{ref}	Source Current of Vref		200			μA
$I_{OH\ (relay)}$	Source Current of Relay				5	mA
$I_{OL\ (triac)}$	Sink Current of TRIAC				15	mA
f_{TB}	Frequence of TB		12.8	16	19.2	KHz
f_{TC}	Frequence of TC		12.8	16	19.2	KHz
A_{VO}	OP Amp open loop gain	VDD=5V		100		dB