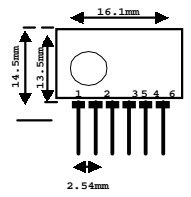


# TWS-434 TRANSMITTER

**NEW !!**  
Telemetry &  
Radio Control is  
Easy Now !



- pin 1 : Vcc
- pin 2 : Vcc
- pin 3 : Gnd
- pin 4 : Gnd
- pin 5 : RF Output
- pin 6 : Code Input

Frequency 300 - 433MHz Band

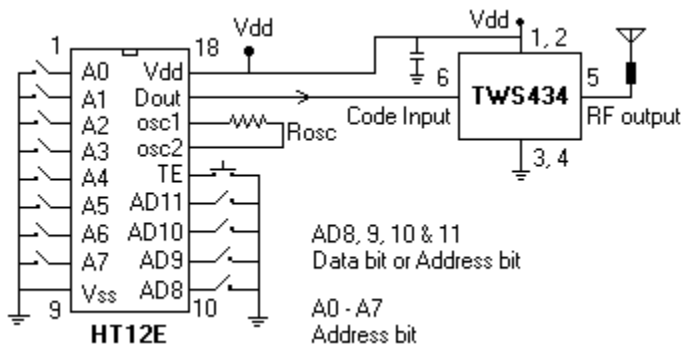
Modulation : AM ( Code )  
Supply Voltage : 1.5v - 15 v dc  
RF Output Power : 8mW

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
Vcc	Operating supply voltage		1.5	-	12	V
Icc	Peak Current		-	5	9	mA
Vin	Input High Voltage	IData=100Ua (High)	Vcc-0.5	-	Vcc	V
Vii	Input Low Voltage	IData=0Ua (Low)	-	-	0.3	V
Fo	Absolute Frequency		314.8	315	315.2	MHz
$\Delta$ EO	Relative To 433.92MHz			+/-150	+/-200	KHz
Po	RF Out Power Into 50ohm		-3	0	+2	dBm
	Modulation Bandwidth	External Encoding	-	5	-	KHz
Tr	Modulation Rise Time		-	-	100	uS
Tf	Modulation Fall Time		-	-	100	uS

Notes : ( Case Temperature = +25C +/- 2C Test Load Impedance = 50 ohm )

## Application Circuit I:

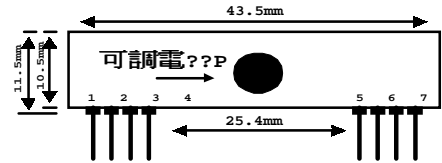
Typical Keychain Transmitter using HT12E-18DIP, a Binary 12 bit Encoder from Holtek Semiconductor Inc.



## Laipac Technology, Inc.

105 West Beaver Creek Rd. Unit 207 Richmond Hill Ontario L4B 1C6 Canada  
Tel: (905)762-1228 Fax: (905)770-6143 e-mail: info@laipac.com

# RWS-434 RECEIVER



- pin 1 : Gnd
- pin 2 : Digital Output
- pin 3 : Linear Output
- pin 4 : Vcc
- pin 5 : Vcc
- pin 6 : Gnd
- pin 7 : Gnd
- pin 8 : Ant ( About 30 - 35 cm )

Frequency 300 - 433MHz Band

Modulation : AM  
Supply Voltage : 4.5v - 5.5 v dc  
Sensitivity : 3uVrms  
Output : Digital & Linear  
Application : Radio Remote Control

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
Vcc	Operating supply voltage		4.9	5	5.1	
ITot	Operating supply voltage		-	4.5	-	
I Data	Data Out	Data = +200 uA ( High ) I	Vcc-0.5	-	Vcc	V
		I Data = -10 uA ( Low )	-	-	0.3	V

Electrical Characteristics					
Characteristics	SYM	Min	Typ	Max	Unit
Operation Radio Frequency	FC	300 - 434			MHz
Sensitivity	Pref			-106	dBm
Channel Width		+/-500			KHz
Noise equivalent BW	NEB		5	4	KHz
Baseboard data rate				3	Kb/s

## Application Circuit II:

Typical RF Receiver using HT12D-18DIP, a Binary 12 bit Decoder with 8 bit uC HT48RXX from Holtek Semiconductor Inc.

