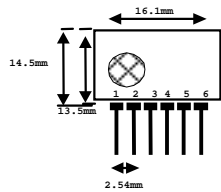


Easy-Link
Wireless

TLP-434 Transmitter

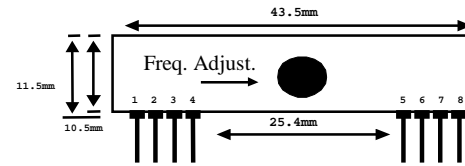


pin 1 : Vcc
pin 2 : Vcc
pin 3 : Gnd
pin 4 : Gnd
pin 5 : RF Output
pin 6 : Digital Data Input

Frequency 315, 418 and 433.92MHz

Modulation : ASK
Operation Voltage : 2 - 12 VDC
RF Output Power : 8mW @3.6V

RLP-434 Receiver



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

Frequency 315, 418 and 433.92MHz

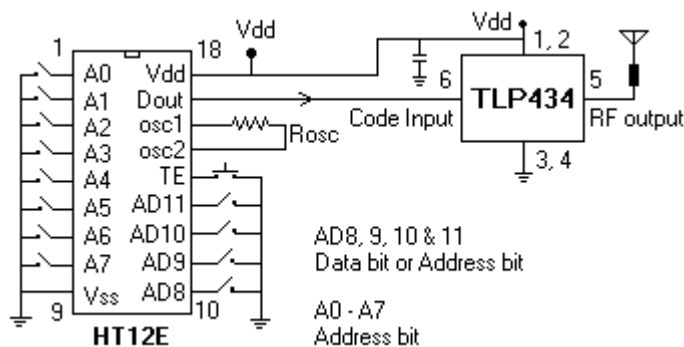
Modulation : ASK
Supply Voltage : 4.5 - 5.5 VDC
Output : Digital & Linear
Sensitivity : 3uVrms

| Symbol | Parameter | Conditions | Min | Typ | Max | Unit |
|--------|--------------------------|---------------------|---------|--------|---------|------|
| Vcc | Operating supply voltage | | 2.0 | - | 12.0 | V |
| Icc | Peak Current | | - | 5 | - | mA |
| Vh | Input High Voltage | Idata= 100uA (High) | Vcc-0.5 | Vcc | Vcc+0.5 | V |
| VI | Input Low Voltage | Idata= 0 uA (Low) | - | - | 0.3 | V |
| FO | Absolute Frequency | 315Mhz module | 314.8 | 315 | 315.2 | MHz |
| | Relative To 433.92MHz | | | +/-150 | +/-200 | KHz |
| PO | RF Output Power- 50ohm | Vcc = 9V to 12V | - | 16 | - | dBm |
| | | Vcc = 5V to 6V | - | 14 | - | dBm |
| DR | Data Rate | External Encoding | - | 2.4K | 3K | bps |

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

Application Circuit I:

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



AD8, 9, 10 & 11
Data bit or Address bit
A0 - A7
Address bit

| Symbol | Parameter | Conditions | Min | Typ | Max | Unit |
|--------|--------------------------|--------------------------|---------|-----|-----|------|
| Vcc | Operating supply voltage | | 4.5 | 5 | 5.5 | V |
| Itot | Operating Current | | - | 3.5 | 4.5 | mA |
| Vdata | Data Out | Idata = +200 uA (High) | Vcc-0.5 | - | Vcc | V |
| | | Idata = -10 uA (Low) | - | - | 0.3 | V |

| Electrical Characteristics | | | | | |
|----------------------------|------|------------------|------|------|------|
| Characteristics | SYM | Min | Typ | Max | Unit |
| Operation Radio Frequency | FC | 315, 418 and 434 | | | MHz |
| Sensitivity | Pref | -100 | -103 | -106 | dBm |
| Channel Width | | +-1.5 | | | Khz |
| Receiver Turn On Time | | 5 | | | ms |
| Noise equivalent BW | NEB | 4 | | | Khz |
| Baseboard Data Rate | | 3 | | | 5 |

Application Circuit II:

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

