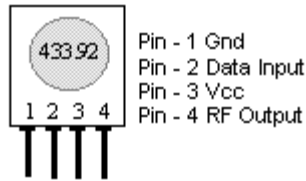


TWS-434 / RWS-434
http://www.rentron.com

TWS-434A RF Transmitter

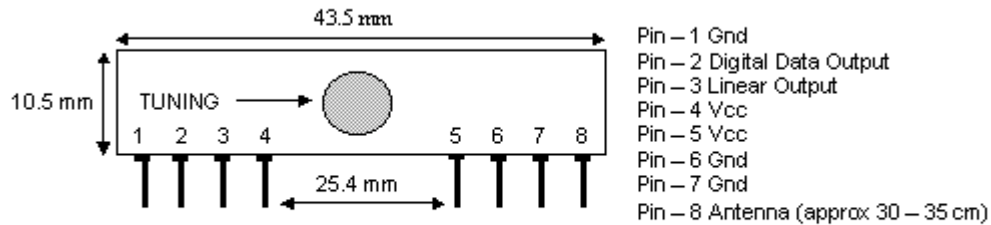


Module size W = 0.426" H = 0.6" lead spacing 0.1"

Frequency: 433.92MHz
Modulation: AM
Operating Voltage: 2 - 12 VDC

Symbol	Parameter	Condition	Min	Typ	Max	Unit
Vcc	Supply Voltage		2.0	-	12.0	V
I _p	Peak Current	2V / 12V	-	1.64 / 19.4	-	mA
V _h	Input High Voltage	I _{data} = 100uA (High)	Vcc-0.5	Vcc	Vcc+0.5	V
V _l	Input Low Voltage	I _{data} = 0 uA (Low)	-	-	0.3	V
F _o	Operating Frequency		433.90	433.92	433.94	MHz
T _r / T _f	Modulation Rise / Fall Time	External Coding	-	-	100 / 100	uS
P _o	RF Output Power – Into 50Ω	Vcc = 9 to 12 V Vcc = 5 to 6V	-	16 14	-	dBm
D _r	Data Rate	External Coding	-	2.4K	3K	Bps

RWS-434 RF Receiver



Frequency: 433.92MHz
Modulation: AM
Operating Voltage: 4.5 - 5.5 VDC
Output: Digital & Linear

Symbol	Parameter	Condition	Min	Typ	Max	Unit
Vcc	Supply Voltage		4.5	5	5.5	V
I _t	Operating Current		-	3.5	4.5	mA
	Channel Width	+ / - 500				kHz
R _d	Data Rate				3k	Bps
V _{dat}	Data Out	I _{data} = +200 uA (High)	Vcc-0.5	-	Vcc	V
		I _{data} = -10 uA (Low)	-	-	0.3	V

4

3

2

1

D

D

C

C

B

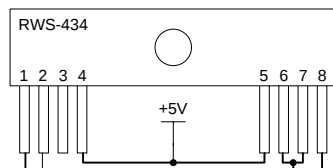
B

A

A

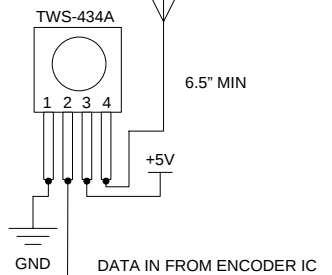
ANTENNA

6.5" MIN

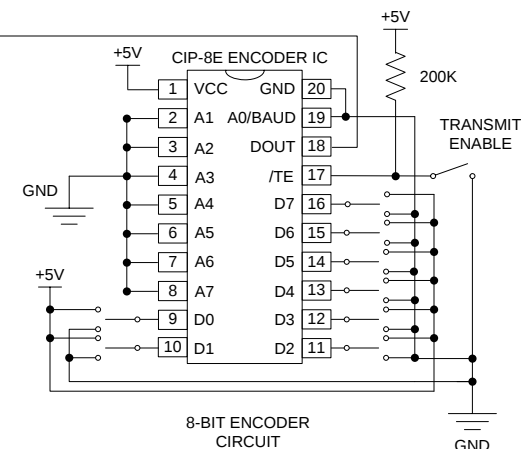


ANTENNA

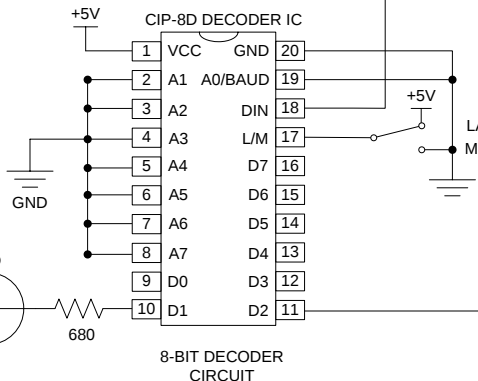
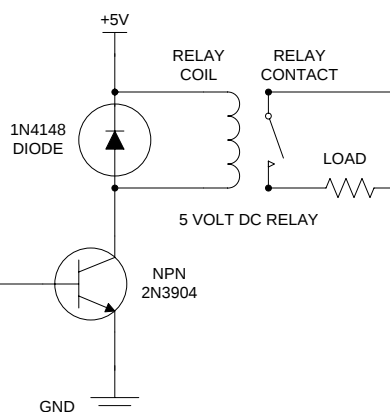
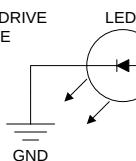
6.5" MIN



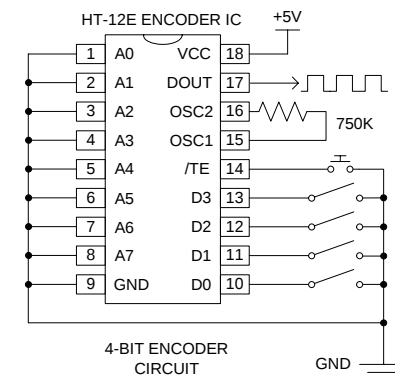
DATA IN FROM ENCODER IC

8-BIT ENCODER
CIRCUIT

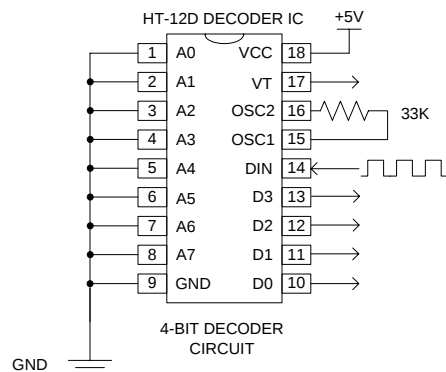
CIP-8D DECODER IC

8-BIT DECODER
CIRCUITDIRECT LED DRIVE
EXAMPLE[EXAMPLE]
NPN RELAY DRIVE CIRCUIT
FOR RECEIVER

DUPLICATE DRIVE CIRCUIT FOR EACH CONTROL OUTPUT AS REQUIRED

4-BIT ENCODER
CIRCUIT

HT-12D DECODER IC

4-BIT DECODER
CIRCUIT4-BIT & 8-BIT
RF REMOTE CONTROL
TX / RX / DRIVE CIRCUITS

DRAWN REYNOLDS ELECTRONICS

ISSUED

SIZE

FSCM NO

DWG NO

REV

1

A

SCALE

1 : 1

SHEET

1 OF 1