

NOTE: ALL ADDRESS PINS MUST BE AT GROUND OR VCC
 DO NOT ALLOW TO FLOAT

DECODER ABSOLUTE MAX DRIVE CURRENT:
 25 mA MAX PER OUTPUT PIN | SINK OR SOURCE | 200 mA MAX (ALL COMBINED)

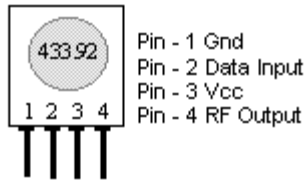
ADDRESS PINS MAY BE CONNECTED TO GROUND, VCC, OR ANY COMBINATION OF GROUND & VCC, AND SHOULD NOT BE ALLOWED TO FLOAT

GROUNDING /TE PIN INITIATES DATA TRANSMISSION
 USE 100K TO 200K EXTERNAL PULL-UP AS SHOWN ABOVE

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| | | | |
|---|-----------------------|-----------|-------------|
| Title | | | |
| SAMPLE TWS-434A/RWS-434 CIRCUIT SCHEMATICS WITH 8-BIT "CIP-8E" ENCODER & "CIP-8D" DECODER IC's | | | |
| Size | Number | Revision | |
| Orcad A | TWS-8-BIT-KIT | A.1 | |
| Date: | 17-Jul-2006 | Sheet of | 1 of 1 |
| File: | C:\CAD\SCHEMATICS.Ddb | Drawn By: | B. REYNOLDS |

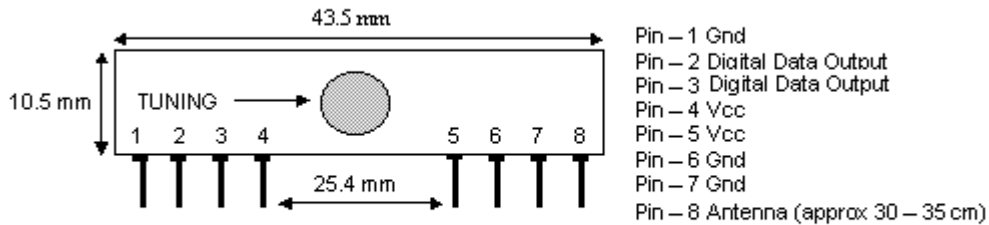
TWS-434A RF Transmitter



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) | V _{cc} -0.5 | V _{cc} | V _{cc} +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 | V _{cc} = 9 to 12 V V _{cc} = 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

| 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) | V _{cc} -0.5 | - | V _{cc} | V |
| | | I _{data} = -10 uA (Low) | - | - | 0.3 | V |