



Long Range Wireless Applications

Designed for long-range (up to 1250 ft*) unlicensed wireless applications under Part 15 of the FCC Regulations. The receiver provides excellent sensitivity (-112 dBm typical), front-end selectivity and immunity from desensitization. The low power requirements make it ideal for battery operation. No production tuning and only two external components are necessary. The module is packaged in an RFI/EMI shielded enclosure. Use with Applied Wireless transmitters.

RX Series

Through-Hole Package



303, 315,
418, 433 MHz
**On-Off Keyed Receiver
Module**

Features

- Compatible with TX, KTX, TXAM Series Transmitters
- Low Cost
- Simple Application
- Long Range-- exceeds 1250 ft*
- No RF Design Required
- Low Power Requirements
- Conforms to FCC Requirements

Typical Applications

- Remote Control
- Data Transmission
- Security – Home/Industrial/Auto
- Telemetry
- RFID
- Utility Meter Reading

Frequency (MHz)	Model Number	Matching Key Chain Transmitter	Matching TXAM Transmitter	Matching Eval Board
303.825	RX303A	KTX303A3	TXAM303AT	EVTX303A
315.000	RX315A	KTX315A3	TXAM315AT	EVTX315A
418.000	RX418A	KTX418A3	TXAM418AT	EVTX418A
433.920	RX433A	KTX433A3	TXAM433AT	EVTX433A

Electrical Characteristics

Sym	Parameter	Min	Typ	Max	Unit
VCC	Operating Voltage Range	2.8	3.0	3.3	Volts
Icc	Operating Current (at VCC=3V & Din=3V)		10		mA
f _{max}	Data Rate		2k		bps
	Sensitivity (at 1Kbps)		-112		dBm
f _c	Center Frequency		See Chart		MHz
BW	Receiver RF Bandwidth	450		650	kHz
	Spurious Response Rejection @ 10 MHz		-80		dBm
Z _{out}	Antenna Input Impedance		50		Ohms
T _{op}	Operating Temperature	-20		+70	C

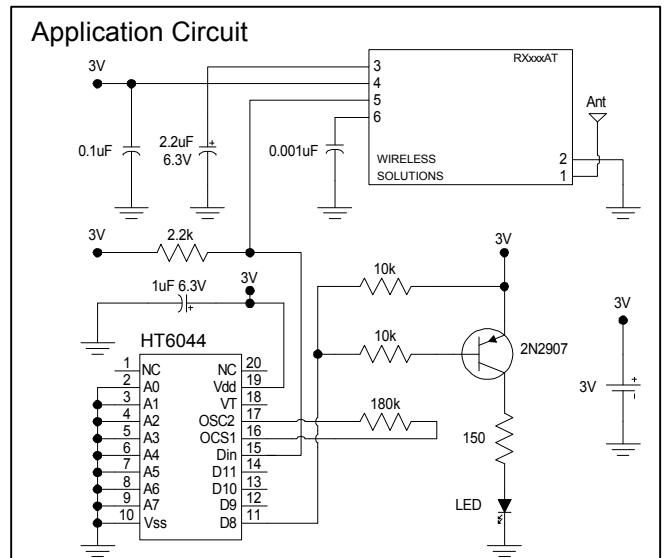
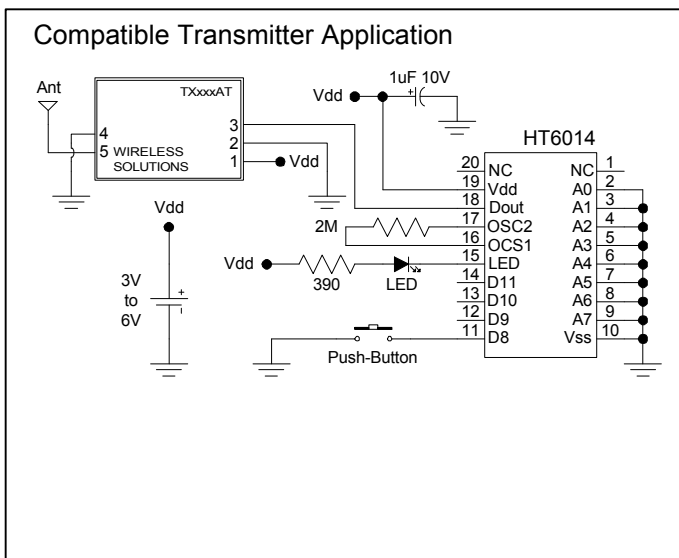
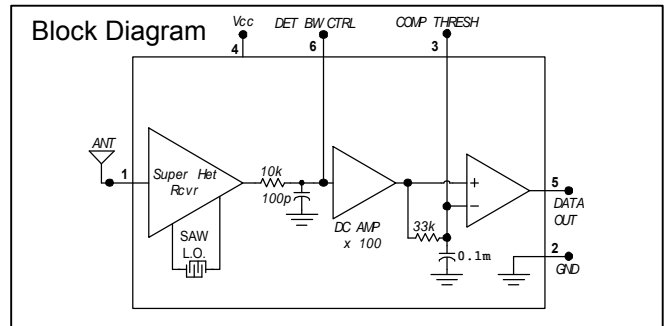
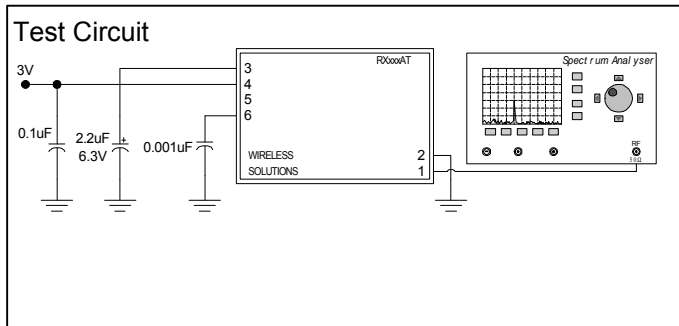
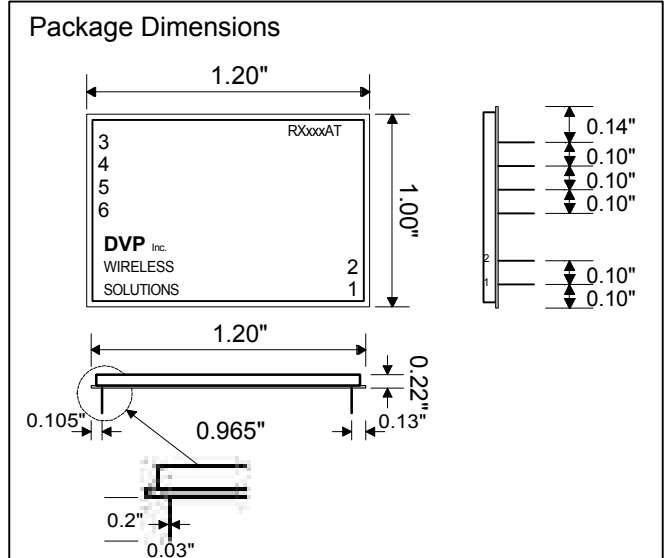
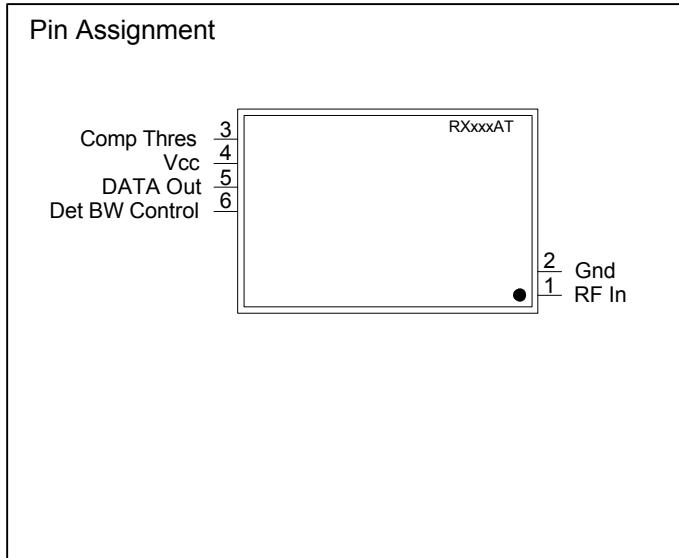
Notes: * Line of sight, ground plane & quarter wave antennas. When used with TXxxxA transmitter. Values of C1 and C2 can be changed to optimize comparator for various data rates and formats. See application notes.

Antennas: All antennas should be 50 ohms. A typical antenna would be a quarter wavelength wire or rod.

Specifications subject to change without notice or obligation.

Maximum Ratings

Sym	Parameter	Value	Unit
VCC	DC Supply Voltage	0 to 3.8	Volts
RF _{in}	RF Input	+10 dBm	Volts
T _{stg}	Storage Temperature	-25 to +125	C



Specifications subject to change without notice or obligation.