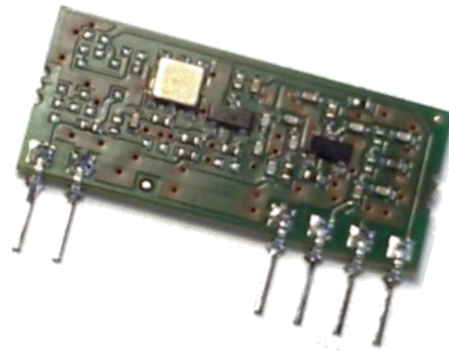


Wireless Transparent Modules Datasheet

32001151V3

OOK TRANSMITTER 433.92 MHz

Data Sheet



Overview

Low cost, ultra-compact SAW-Resonator stabilized OOK transmitter in the 434 MHz SRD Band.

Typical applications are Security Systems, Surveillance Systems, Data Transmission.

Contents

1.	Description	3
2.	Mechanical Dimensions	3
3.	Pin Definition	3
4.	Electrical characteristics	4
4.1	Absolute Maximum Ratings	4
4.2	Operating Condition	4
4.3	Temperature Range Curves	5
5.	Application Notes.....	6
6.	Regulatory Approvals.....	6
7.	Revision History.....	6

1. Description

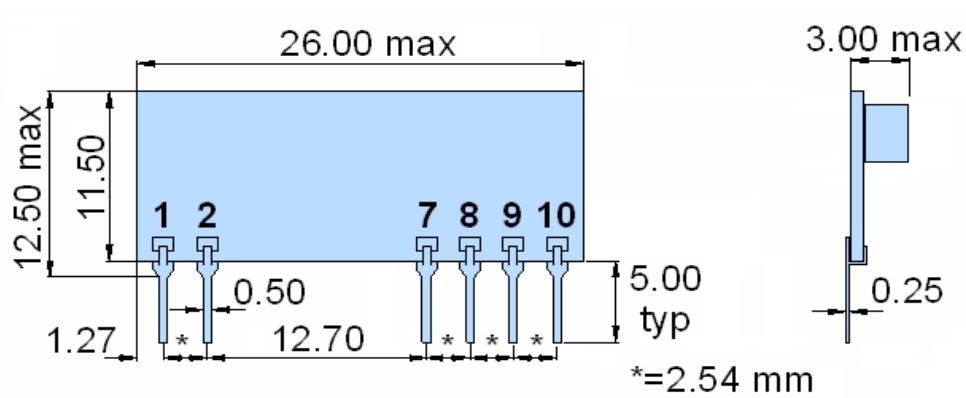
This module is a simply solution to transmit data at 433.92 MHZ frequency in OOK modulation.

TTL and CMOS levels compatible input.

Very compact and low profile.

A “buffer” stage separates output from oscillator ensuring higher stability and low harmonic emissions.

2. Mechanical Dimensions



3. Pin Definition

- 1 = TX Data
- 2 = GND
- 7 = GND
- 8 = RF Output (50 Ω)
- 9 = GND
- 10 = + Vcc

4. Electrical characteristics

4.1 Absolute Maximum Ratings

Parameter	Max.	Unit
Supply voltage, +Vcc, pin 10:	5.0	V
Pin 1 voltage level respect to GND	+Vcc	V
Storage Temperature:	-40 ÷ 100	°C
Operating Temperature:	-20 ÷ 70	°C

4.2 Operating Condition

GENERAL ELECTRICAL CHARACTERISTICS @ 25 °C

Parameter	Min.	Typ.	Max.	Unit	Notes
Supply Voltage (Vcc)	2.1	3.0	3.6	V	
DC Current Drain	-	7.5	-	mA	See note 1
Operating Frequency	-	433.92	-	MHz	
Occupied Bandwidth	-	-	-	kHz	
Operating Channel Width	-	-	740	kHz	See note 3
Center Frequency Accuracy	-	±100	-	kHz	
Output Power	-	10	-	dBm	See note 1,2
Output impedance	-	50	-	Ω	
Spurious Radiated Emissions	-	-	-57	dBm	
Baud Rate	-	-	9600	Baud	
Input Logic Low	-0.7	-	0.4	V	
Input Logic High	0.9*Vcc	-	1.1*Vcc	V	

4.2.1 Notes:

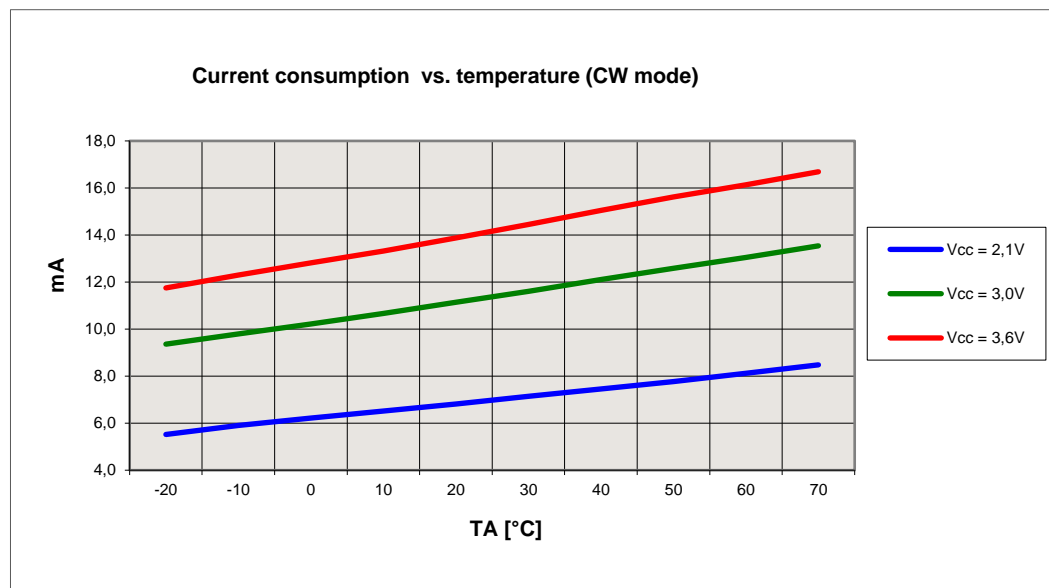
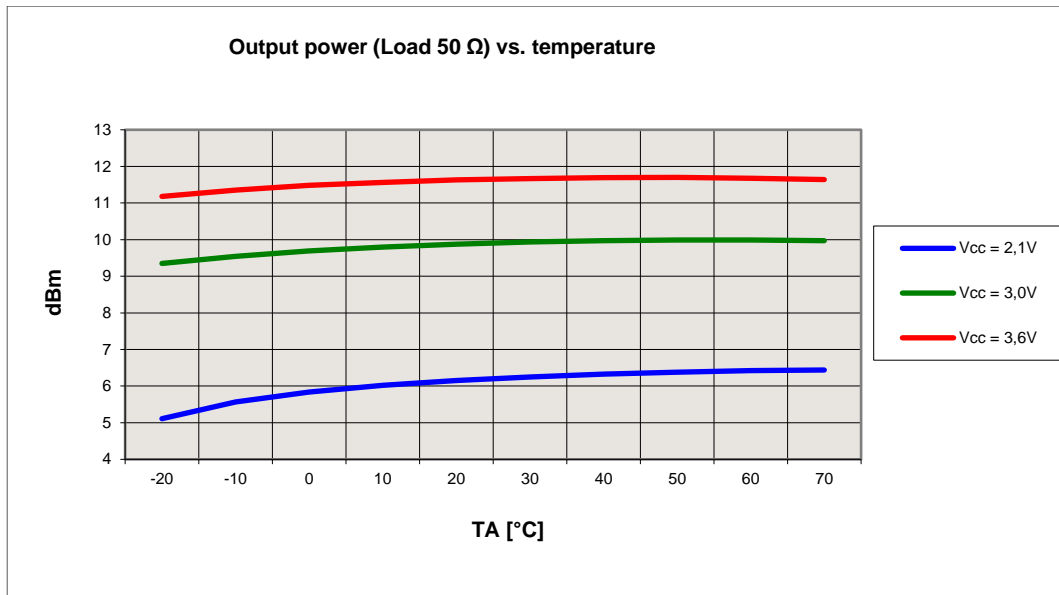
Note 1: +Vcc = 3 V, 1.2 kHz square wave modulation 0-3 V, duty-cycle 50 %, logic “1” = 3 V.

Note 2: The output power is dependent upon logic “1” level.

Note 3: ERC RECOMMENDATION (70-03) Annex I band g1.

4.3 Temperature Range Curves

Note: All RF parameters measured with input (pin 8) connected to a 50-Ω impedance signal load.



Note: All graphs must be considered as indicative typical results in accordance with temperature variation.

5. Application Notes

Title	Description	Doc

6. Regulatory Approvals

Doc	Title	Description
32001151V3_DoC.pdf	Declaration of Conformity	Declaration of the conformity with the essential requirements of the European Directive 2014/53/EU

7. Revision History

Revision	Date	Description
1.2	13.10.2019	Final Release