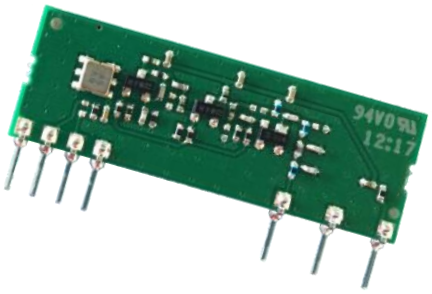
Wireless Transparent Modules Datasheet
32001387V3
OOK TRANSMITTER 433.92 MHz
Data Sheet



Overview

Low cost, SAW-Resonator stabilized OOK transmitter in the 434 MHZ SRD Band.
Typical applications are Security Systems, Surveillance Systems, Data Transmission.

Contents

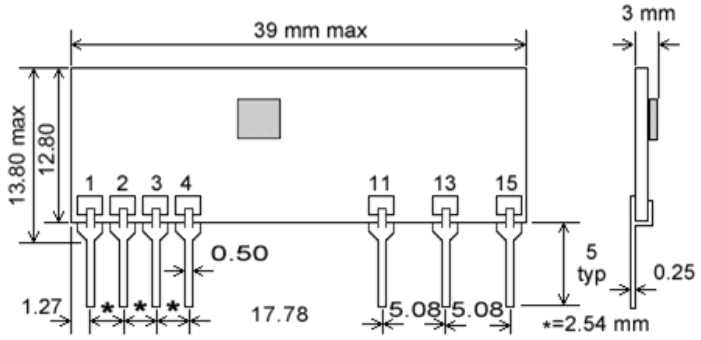
1. Description

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

3 Volt version.

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

2. Mechanical Dimensions



3. Pin Definition

1 = GND
2 = TX Data
3 = Not Connected
4 = GND
11 = RF Output (50 Ω)
13 = GND
15 = + Vcc

4. Electrical characteristics

4.1 Absolute Maximum Ratings

Parameter	Max.	Unit
Supply voltage, +Vcc, pin 15:	4.0	V
Pin 3, 4 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	3.3	V	
DC Current Drain	-	5	-	mA	See note 1
Operating Frequency	-	433.92	-	MHz	
Occupied Bandwidth	-	-	40	kHz	See note 1
Operating Channel Width	-	-	200	kHz	
Center Frequency Accuracy	-	±100	-	kHz	
Output Power	-	-	10	dBm	See note 1,2,3
Output impedance	-	50	-	Ω	
Baud Rate	-	-	4800	Baud	
Input Logic Low	-0.7	-	0.4	V	
Input Logic High	0.95*Vcc	-	1.05*Vcc	V	

4.2.1 Notes:

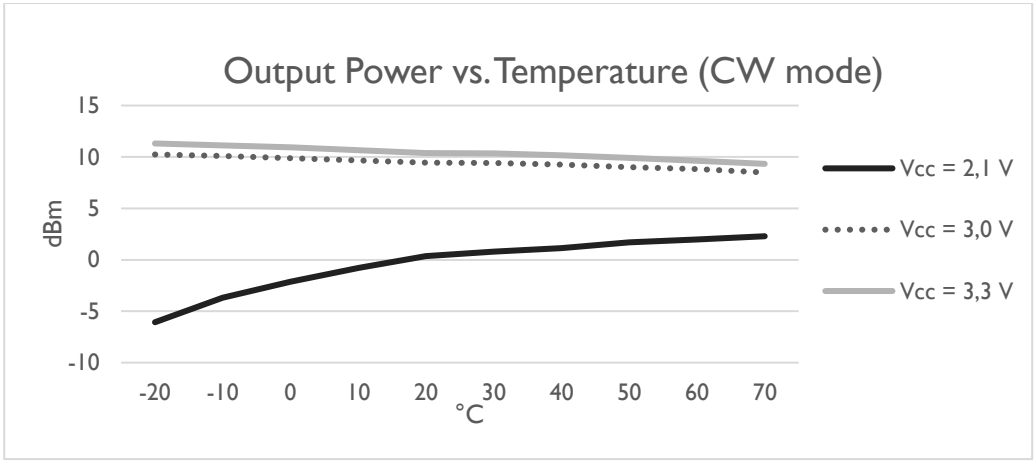
Note 1: +Vcc = 3 V, 2.4 kHz square wave modulation 0-3 V, duty-cycle 50 %, logic "1" = 3 V.

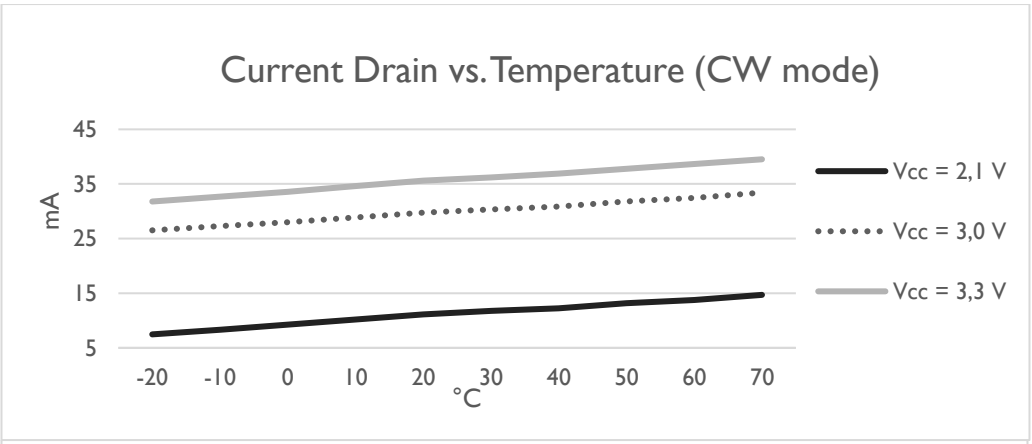
Note 2: The output power is dependent upon logic "1" level.

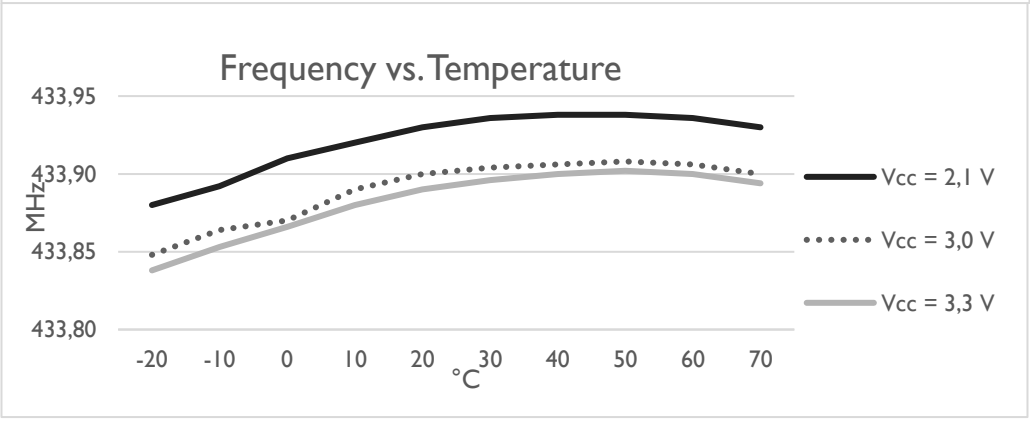
Note 3: In order to not exceed the maximum power permitted by the ETSI EN 300 220 regulation, choose an appropriate antenna system and power supply.

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
32001387V3_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
1.0	27.11.2020	Final Release