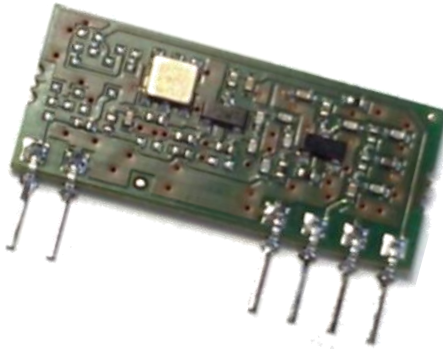


Wireless Transparent Modules Datasheet

32001012

OOK TRANSMITTER 868.30 MHz

Data Sheet



Overview

Low cost, ultra-compact SAW-Resonator stabilized OOK transmitter in the 868MHZ SRD Band.

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

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1. Description

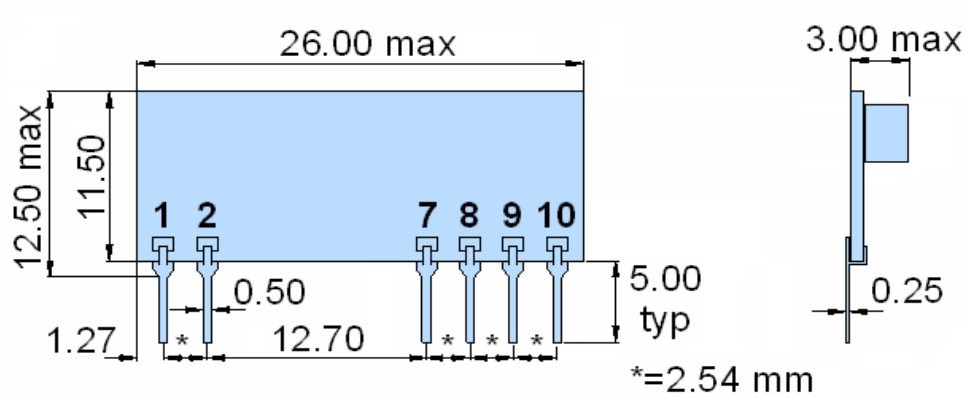
This module is a simply solution to transmit data at 868.3 MHz frequency in OOK modulation.

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:	9.0	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)	4.0	5.0	5.5	V	
DC Current Drain	-	22.5	-	mA	See note 1
Operating Frequency	-	868.15	-	MHz	
Occupied Bandwidth	-	-	130	kHz	
Operating Channel Width	-	-	600	kHz	See note 3
Center Frequency Accuracy	-	±150	-	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	4.0	-	6.0	V	

4.2.1 Notes:

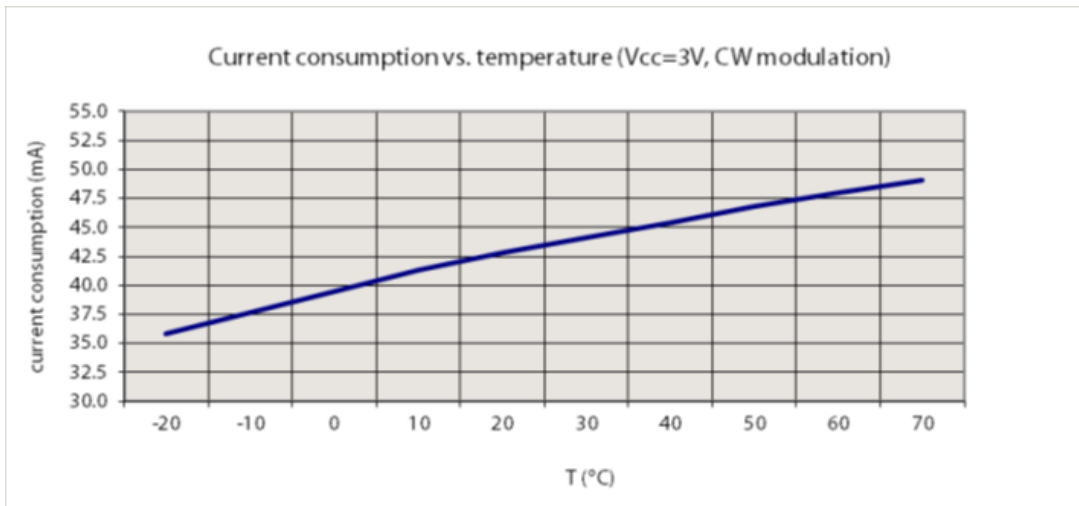
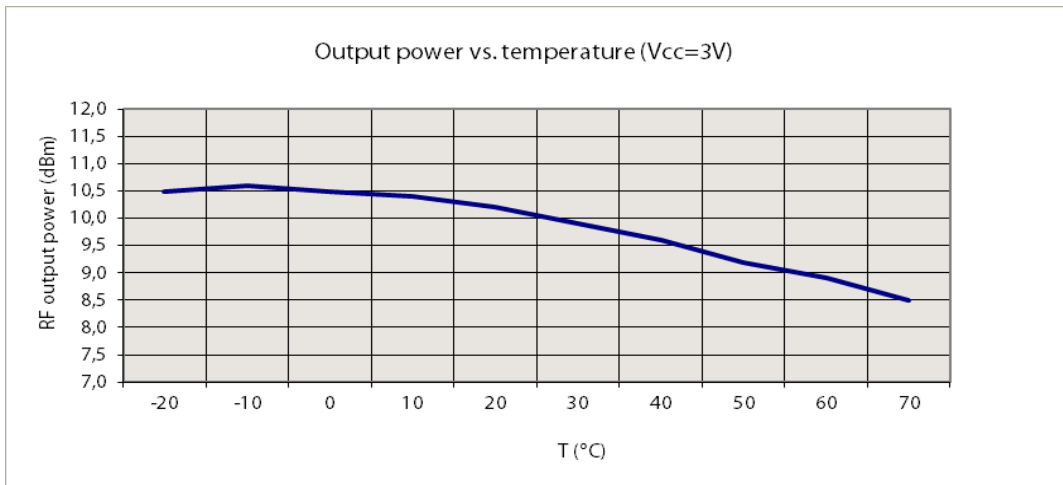
Note 1: +Vcc = 5 V, 1.2 kHz square wave modulation 0-5 V, duty-cycle 50 %, logic “1” = 5 V.

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
32001012_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
2.1	25.10.2011	Final Release