
433 MHz Single Chip RF Transceiver RF-NRF401

FEATURES

- True single chip FSK transceiver
- Few external components required
- No set up or configuration
- No coding of data required
- 20kbit/s data rate
- 2 channels
- Wide supply range
- Very low power consumption
- Standby mode

APPLICATIONS

- Alarm and Security Systems
- Automatic Meter Reading(AMR)
- Home Automation
- Remote Control
- Surveillance
- Automotive
- Telemetry
- Toys
- Wireless Communication

GENERAL DESCRIPTION

nRF401 is a true single chip UHF transceiver designed to operate in the 433MHz ISM (Industrial, Scientific and Medical) frequency band. It features Frequency Shift Keying(FSK) modulation and demodulation capability. nRF401 operates at bit rates Up to 20kbit/s. Transmit power can be adjusted to a maximum of 10dBm. Antenna Interface is differential and suited for low cost PCB antennas. nRF401 features a Standby mode which makes power saving easy and efficient. nRF401 operates from a Single +3-5V DC supply.

As a primary application, nRF401 is intended for UHF radio equipment in compliance with the European Telecommunication Standard Institute (ETSI) specification EN 300 220-1 V1.2.1

QUICK REFERENCE DATA

Parameter	Value	Unit
Frequency,Channel#1/Channel#2	433.92/434.33	MHz
Modulation	FSK	
Frequency deviation	±15	kHz
Max. RF output power@400Ù,3V	10	dBm
Sensitivity @400Ù, BR=20 kbit/s,BER<10 ⁻³	-105	dBm
Maximum bit rate	20	kbit/s
Supply voltage	2.7-5.25	V
Receive supply current	250*	ìA
Transmit supply <u>current</u> @-10 dBm output power	8	mA
Standby supply current	8	ìA

