
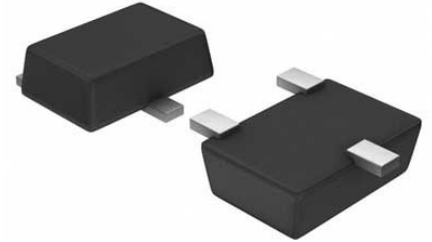


RF Transmitter OOK 2.7V 6-Pin SOT-23 T/R

Manufacturer:	Microchip Technology, Inc
Package/Case:	SOT-23
Product Type:	Communication & Networking ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The MICRF114 is a simple, low-cost OOK transmitter with programmable output power. It is primarily intended for command and control applications (for example, Remote Keyless Entry (RKE) and Garage Door Opener (GDO) systems, etc.). The transmitter is synthesizer based for high-frequency accuracy. It operates on a single frequency which is determined by the frequency of the crystal connected to the built-in reference oscillator. This frequency can be selected from a wide range. The more popular transmit frequencies require readily available crystal frequencies (for example, a 13.56 MHz crystal for a 433.92 MHz transmit frequency). The RF performance of the transmitter is compliant with FCC and IC regulations, and with some Japanese standards. European (ETSI) requirements can be met at low radiated power. The MICRF114 is optimized for battery-powered applications that feature low current consumption and can operate over a wide supply voltage range. Internal circuits sensitive to supply voltage variations run from the on-chip Low Dropout (LDO) regulator. In order to reduce pin count and system Bill of Materials (BOM), the LDO regulator does not need an external capacitor for stability, and the single-pin reference oscillator has a programmable, integrated crystal load capacitor. The single-ended RF output allows easy matching to monopole antennas with a minimal number of external components.

Key Features

Fully Integrated Low-Power Sub-GHz RF Transmitter

On-chip LDO

Programmable frequency

Single-Pin Crystal Oscillator with Integrated, Programmable Load Capacitor

Wide Operating Voltage Range: 1.8V to 3.6V

Industrial Temperature Range (-40°C to +85°C)

Low Current Consumption: 0.2 µA in Sleep Mode, 11.7 mA in +10 dBm Transmit Mode

Data Rate: up to 115.2 kbps NRZ, 57.6 kbps Manchester Encoded

On-Off Keying (OOK) Modulation with Power Ramp-up Control

Fast Turn-On and Turn-Off Times

Small Footprint 6-Pin SOT-23 Package

Recommended For You

MICRF002YM

Microchip Technology, Inc

SOP16

MICRF211AYQS

Microchip Technology, Inc

QSOP-16

MICRF219AAYQS

Microchip Technology, Inc

SSOP-16

MICRF220AYQS

Microchip Technology, Inc

SSOP16

MICRF010YM

Microchip Technology, Inc

SOP-8

MICRF113YM6-TR

Microchip Technology, Inc

SOT23-6

MICRF112YMM

Microchip Technology, Inc

MSOP10

MICRF221AYQS

Microchip Technology, Inc

SSOP16

MICRF405YMLTR

Microchip Technology, Inc

BGA

MICRF001YN

Microchip Technology, Inc

DIP-14P

MICRF001BN

Microchip Technology, Inc

DIP14

MICRF213AYQS-TR

Microchip Technology, Inc

QSOP

MICRF007YM-TR

Microchip Technology, Inc

SOIC

MICRF011YN

Microchip Technology, Inc

PDIP

MICRF112YMM-TR

Microchip Technology, Inc

MSOP10