

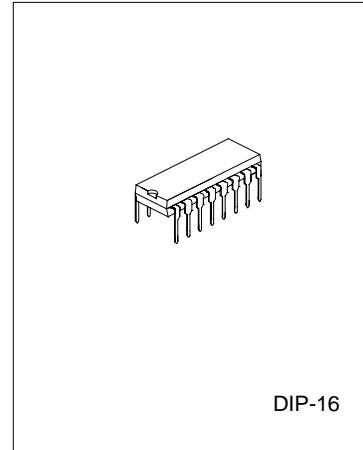
REMOTE CONTROLLER WITH TWO FUNCTIONS

DESCRIPTION

The RX-3 is a CMOS LSI designed for remote controlled car applications. The RX-3 has only 2 keys with 3 states, i.e. forward key for forward function, backward key for backward function, and stop function if there is no signal.

FEATURES

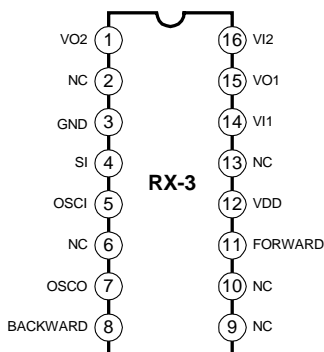
- * Wide operating voltage range ($V_{CC}=2.2 \sim 12V$)
- * Few external components are needed
- * Typical oscillator frequency 76KHz
- * RX-3 built-in Zener 3V
- * 2 functions remote controller including forward/backward



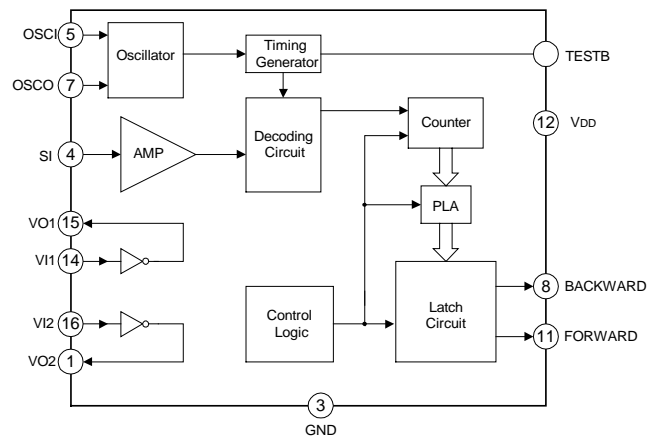
ORDERING INFORMATION

Part No.	Package
RX-3	DIP-16-300-2.54

PIN CONFIGURATION



BLOCK DIAGRAM



PIN DESCRIPTION

Pin No.	Symbol	Description
1	VO2	Inverter 2 output pin for signal amplify
2	NC	No connection
3	GND	Negative power supply
4	SI	Input pin of the encoding signal
5	OSCI	Oscillator input pin
6	NC	No connection
7	OSCO	Oscillator output pin
8	BACKWARD	Backward output pin
9	NC	No connection
10	NC	No connection
11	FORWARD	Forward output pin
12	VDD	Positive power supply
13	NC	No connection
14	VI1	Inverter 1 input pin for signal amplify
15	VO1	Inverter 1 output pin for signal amplify
16	VI2	Inverter 2 input pin for signal amplify

ABSOLUTE MAXIMUM RATINGS

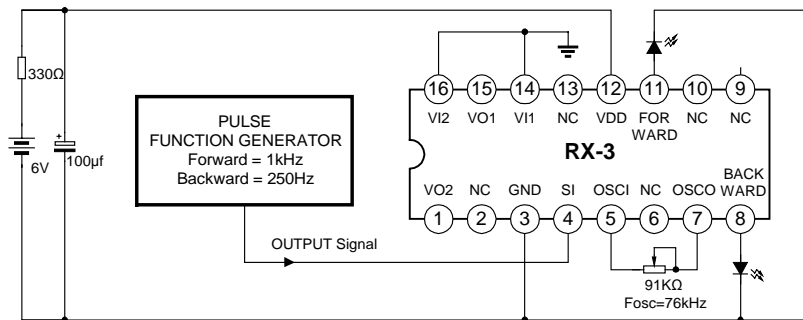
Characteristic	Symbol	Value	Unit
Supply Voltage	V _{DC}	0.3~15	V
Input / Output Voltage	V _{I/O}	GND-0.3~VDD+0.3	V
Operating Temperature	T _{OPR}	-10~60	°C
Storage Temperature	T _{stg}	-25~125	°C

ELECTRICAL CHARACTERISTICS

(V_{DD}=6.0V, F_{osc}=76KHz, T_{amb}=25°C, unless otherwise specified.)

Parameter	Symbol	Min	Typ	Max	Unit
Operating Voltage	V _{DD}	2.2	6	12	V
Operating Current	I _{DD}	--	9	--	mA
O/P Driving Current	I _{drive}	--	5	--	mA
Effect Decoding Frequency Variation	F _{tolerance}	-20%	--	20%	--

TESTING CIRCUIT ($F_{osc}=76\text{kHz}$)



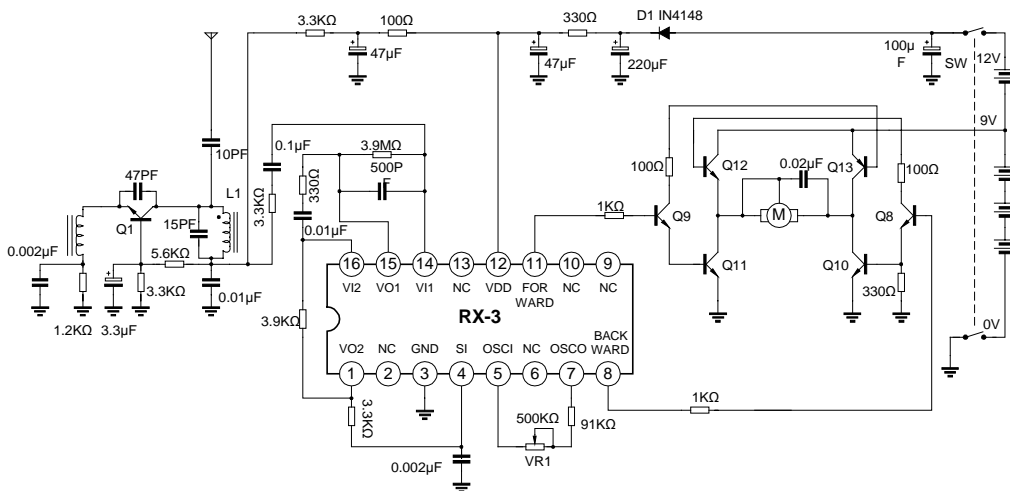
Data Format

Forward Signal: $F_1=1\text{kHz}$

Backward Signal: $F_2=250\text{Hz}$

$F_1=4F_2$ or $F_1=2F_2$ (Mask option)

TYPICAL APPLICATION CIRCUIT



PACKAGE OUTLINE

