

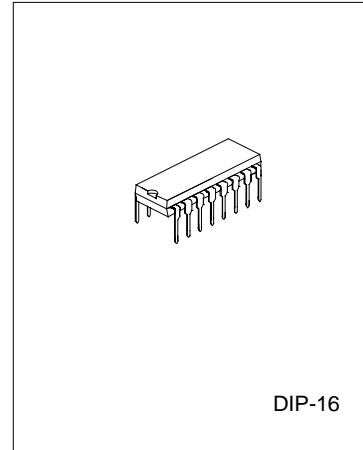
## REMOTE CONTROLLER WITH TWO FUNCTIONS

### 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

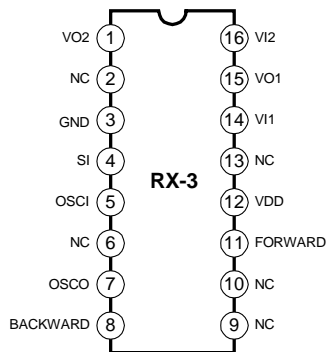
- \* Wide operating voltage range ( $V_{CC}=2.2 \sim 12V$ )
- \* Few external components are needed
- \* Typical oscillator frequency 76KHz
- \* RX-3 built-in Zener 3V
- \* 2 functions remote controller including forward/backward



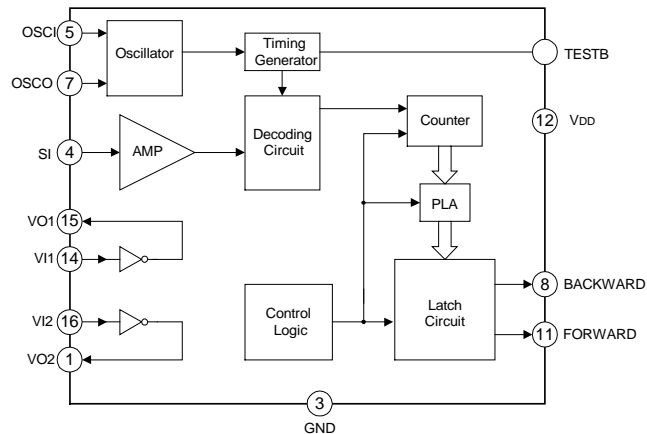
### ORDERING INFORMATION

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**

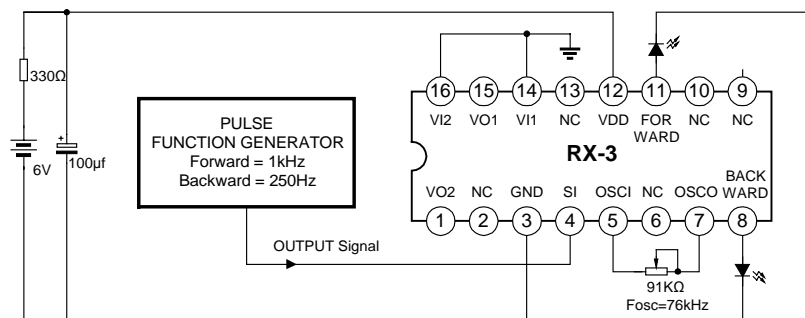
Characteristic	Symbol	Value	Unit
Supply Voltage	V <sub>DC</sub>	0.3~15	V
Input / Output Voltage	V <sub>I/O</sub>	GND-0.3~VDD+0.3	V
Operating Temperature	T <sub>OPR</sub>	-10~60	°C
Storage Temperature	T <sub>stg</sub>	-25~125	°C

**ELECTRICAL CHARACTERISTICS**

(VDD=6.0V, Fosc=76KHz, Tamb=25°C, unless otherwise specified.)

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

### TESTING CIRCUIT (Fosc=76kHz)



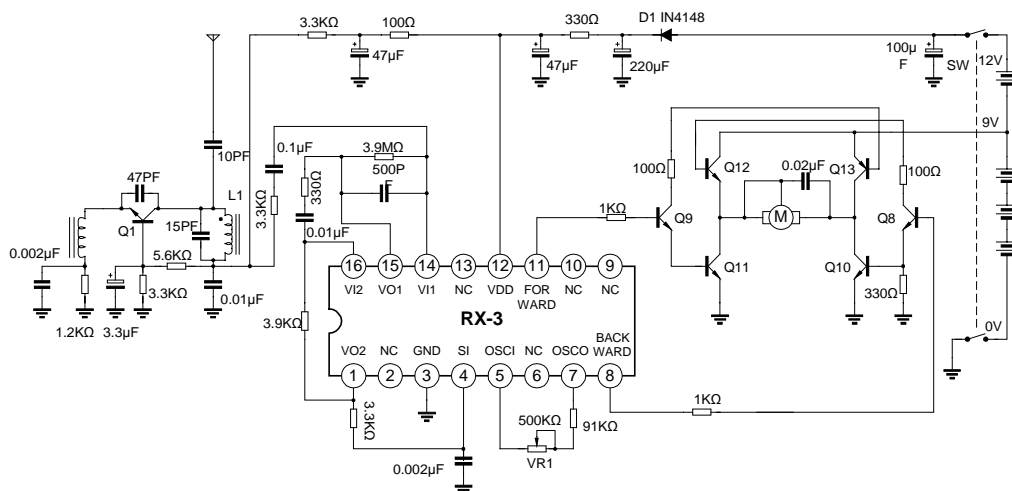
### Data Format

Forward Signal: F1=1kHz

Backward Signal: F2=250Hz

F1=4F2 or F1=2F2 (Mask option)

### TYPICAL APPLICATION CIRCUIT



**PACKAGE OUTLINE**

DIP-16-300-2.54

UNIT:mm

