M8031-2S : DING-DONG SOUND EFFECT GENERATOR IC

General Description

The M8031-2S is a ding-dong sound effect generator IC produced by LSI CMOS technology. With built-in RC oscillator and digital envelope circuits, minimal external components are required. This IC simulates the mechanical ding-dong sound, and is ideal for door bell application.

Features

- 1.3V to 3.3V operating voltage and low power consumption
- One-shot mode of 2 ding-dong playing sequences
- Standard TO-92 package form
- Dynamic speaker can be driven with external NPN transistor

Absolute Maximum Ratings

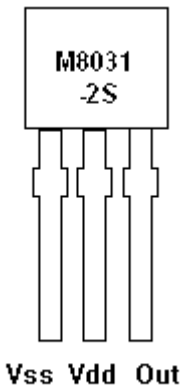
DC Supply Voltage ..... -0.3V to +5.0V
Operating Ambient Temperature ..... -10°C to 60°C
Storage Temperature ..... -55°C to 125°C

Electrical Characteristics

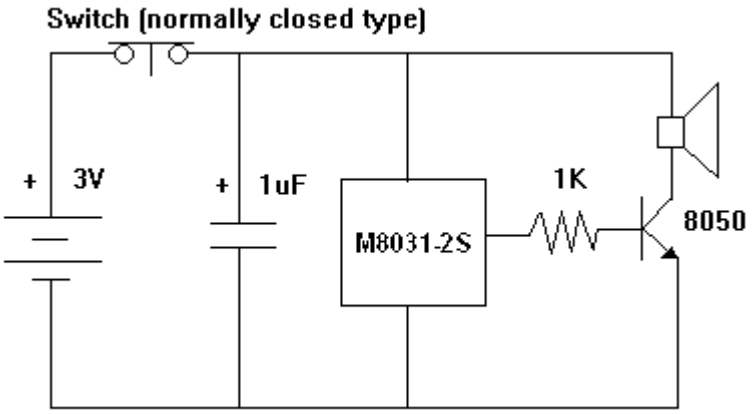
(Vss=0V, Vdd=1.5V, Ta=25°C, unless otherwise specified.)

Parameter	Symbol	Min.	Typ.	Max.	Conditions
Operating voltage	Vdd	1.3V	1.5V	3.3V	
Stand-by current	Is	-	-	0.5μA	All terminal open
Operating current	Idd	-	0.5mA	1mA	
Osc. frequency	Focs	102kHz	120kHz	144kHz	

Pin assignment of TO-92 package form

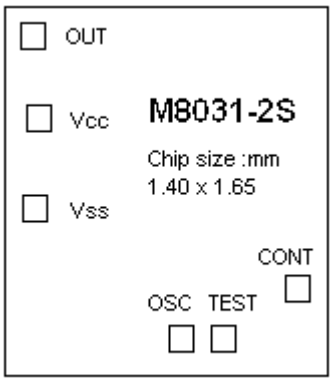


Application Circuit



Bonding Pads Diagram

IC chip substrate is connected to Vss.



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