

Unit Buzzer

SKU:U132



Drive signal:
4KHz 1/2duty square wave

GPIO
INTERFACE

Description

Unit Buzzer is an efficient audio feedback unit based on a passive buzzer. It drives the diaphragm to vibrate and generate sound through an external PWM square-wave signal, enabling buzzer alarms and custom prompt tone playback. The unit communicates via a Grove HY2.0-4P interface and integrates an NPN transistor driver with a protection circuit. It supports a recommended driving frequency of 4KHz and delivers a clear sound pressure level of 72dB. In addition, it adopts a LEGO-compatible mounting hole design, making it easy to integrate with LEGO structures or secure using screws. It is suitable for applications such as alarm systems, user interaction prompts, and intelligent device feedback.

Features

- Buzzer Type: Passive buzzer (requires external PWM drive)
- Sound Pressure Level: 72dB (at 10cm distance, 5V supply)
- Drive Method: PWM square-wave signal (DC high level strictly prohibited)
- Recommended Frequency: 4KHz
- Response Speed: Fast start / stop
- Communication Interface: Grove HY2.0-4P
- 2 x LEGO-compatible mounting holes
- Development Platform
 - UiFlow1
 - UiFlow2

- Arduino IDE

Includes

- 1 x Unit Buzzer
- 1 x HY2.0-4P Grove Cable (5cm)

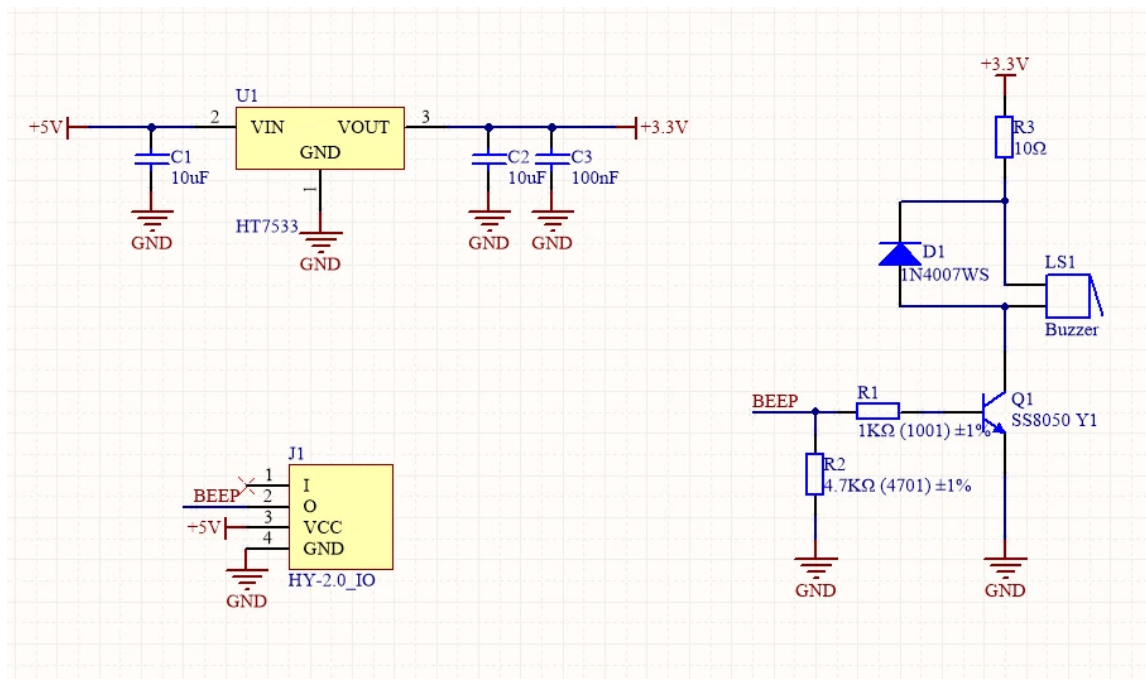
Applications

- Buzzer alarm/notification

Specifications

Specification	Parameter
Drive Frequency	4KHz 1/2 duty square wave
Power Consumption	5V@86mA
Product Size	24.0 x 24.0 x 8.0mm
Product Weight	3.3g
Package Size	138.0 x 93.0 x 9.0mm
Gross Weight	6.8g

Schematics

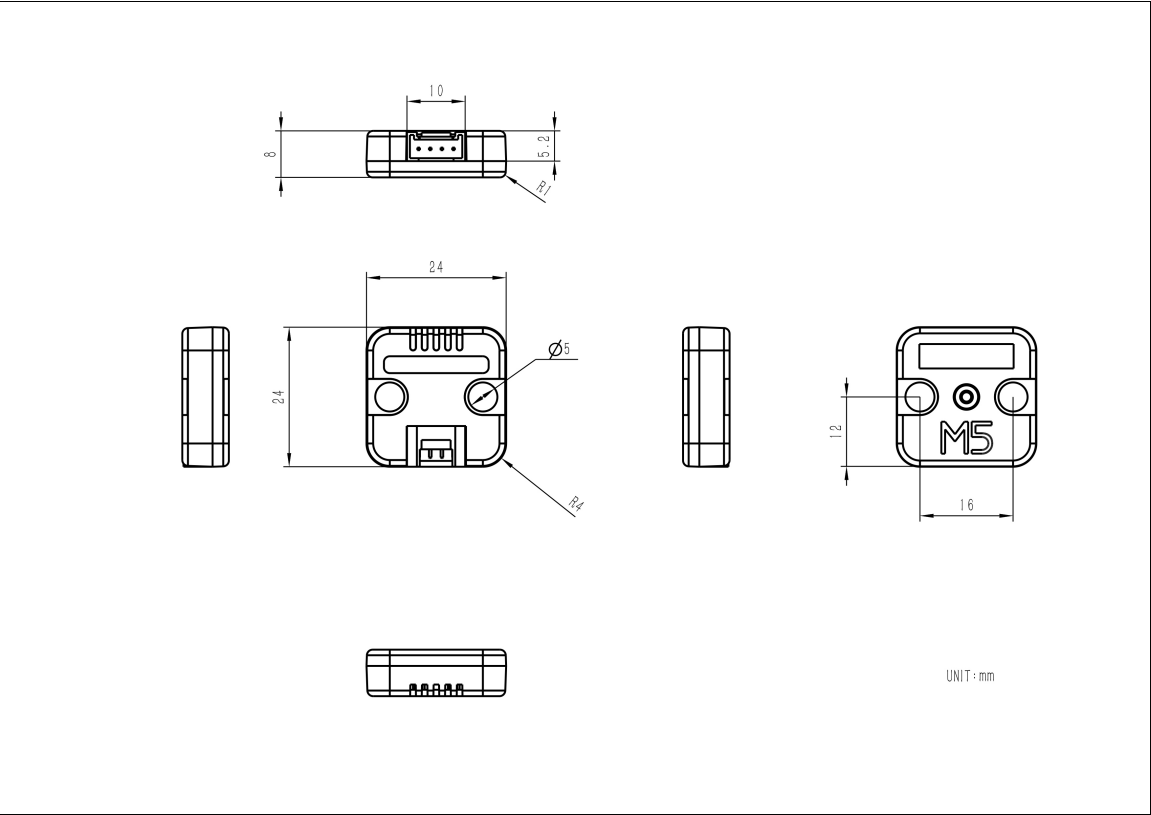


PinMap

Unit Buzzer

HY2.0-4P	Black	Red	Yellow	White
PORT.B	GND	5V	Signal	/

Model Size



Structure

- Unit Buzzer Structure Files

Softwares

Arduino

```
#include <Arduino.h>

#define buzzer_pin 26
int freq = 4000;
int ledChannel = 0;
int resolution = 10;

void setup() {
  ledcSetup(ledChannel, freq, resolution); //Sets the frequency and number of counts corresponding to the c
  ledcAttachPin(buzzer_pin, ledChannel); //Binds the specified channel to the specified I/O port for output.
  ledcWrite(ledChannel, 512); //Output PWM.
}

void loop() {
  ledcWrite(ledChannel, 512); //Output PWM.
}
```

```
delay(3000);  
ledcWrite(ledChannel, 0); //Output PWM.  
delay(3000);  
}
```

UiFlow1

- [Unit Buzzer UiFlow1 Docs](#)

UiFlow2

- [Unit Buzzer UiFlow2 Docs](#)

| Video
