sparkfun

Piezo Speaker - PC Mount 12mm 2.048kHz

COM-07950 ROHS✔ ⚡

★ ★ ★ ★ ⯪ 5

$1.95

1	quantity
◉	2,252 in stock
$1.95	1+ units
$1.85	25+ units
$1.76	100+ units

Description: This is a small 12mm round speaker that operates around the audible 2kHz range. You can use these speakers to create simple music or user interfaces.

Each speaker is PTH solderable and requires an operating voltage of 3.5-5V with a mean current of 35mA max. These speakers also have a typical sound output of 95 dBA and a coil resistance of 42 ±6.3 ohms. Many people call this a buzzer but it is not. The piezo element requires a square wave (common from most microcontrollers) to produce a tone.
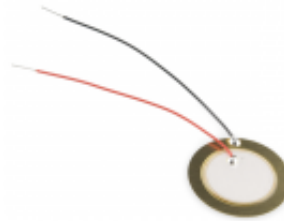
Documents:

- Datasheet

Recommended Products

SparkFun Simon Says - Through-Hole Soldering Kit

◉ KIT-10547

$24.95

★ ★ ★ ★ ⯪ 11

Piezo Element

◉ SEN-10293

$1.50

★ ★ ★ ★ ★ 2

Speaker - 0.5W (8 ohm)

◉ COM-09151

$1.95

Speaker - PCB Mount

◉ COM-11089

$1.95

★ ★ ★ ⯪ ☆ 3

COMMENTS **27**   REVIEWS ★ ★ ★ ★ ⯪ **5**

Customer Reviews

★ ★ ★ ★ ⯪ 4.4 out of 5

Based on 5 ratings:

5 star	2
4 star	3
3 star	0
2 star	0
1 star	0

1 of **1** found this helpful:

★ ★ ★ ★ ☆ **Pretty good little noise maker**

about 9 months ago by darrylh ✔ **verified purchaser**

I've used this speaker to generate an alarm tone. It makes a decent amount of noise, but:

- It's loudest at 2048Hz
- Drive it with a transistor and include the diode (see schematic in datasheet).

2 of **2** found this helpful:

★ ★ ★ ★ ☆ Loud enough for it's size

about 7 months ago by A. Wiggin ✔ **verified purchaser**

It's seems like most people complain that this speaker isn't loud enough but I would disagree. Sounds like it will be plenty loud to wake me up at night over my white noise generator which is what I needed. Plus, how much volume do expect to get out of a SPEAKER this size? A piezo would be louder, yes, but that's not what you're buying.

I followed the schematic in the datasheet; supply voltage is 3.3V, the diode is a simple 1N4148, transistor is a PN2222A (same thing as a 2N3904, just more power capability and what I had on hand!), a 180 ohm base resistor, and driving it with 2048Hz PWM from an Arduino.

I should also say that mine doesn't have the markings like the one in the product picture, but it still works great! That seemed to be something people were complaining about in comments I read.

★ ★ ★ ★ ★ compact goodness

about a month ago by Member #82931 ✔ **verified purchaser**

Good volume, easy to breadboard and work with, one transistor and a pulldown resistor and you're good. I'm with the other guys though, these things amplitude falls of at higher/lower pitches rapidly.