

First, the module Scope:

1. As square wave signal generator which generates a square wave signal for experimental development use.
2. used to generate drive stepper motor drives a square wave signal.
3. produce adjustable pulse for MCU to use.
4. Have an adjustable pulse control-related circuits.

Second, a brief description:

1. Size: 3.1CM * 2.2CM
- 1, the main chip: NE555;
- 2, the input voltage: 5V-15VDC. 5V supply, the output current can be around 15MA; when 12V power supply, output current is about 35MA;
- 3, the input current: $\geq 100\text{MA}$
- 4, the output amplitude: 4.2V V-PP to 11.4V V-PP (different depending on the input voltage, the output amplitude will be different)
- 5, the maximum output current: $\geq 15\text{MA}$ (5V supply, V-PP is greater than 50%), $\geq 35\text{MA}$ (12V power supply, V-PP is greater than 50%)

Three Advantages:

- 1, the output with LED indication, there is no straightforward output (low level LED volume, high LED off frequency is relatively low LED flashing);
- 2, the output frequency range of grades available, the output frequency is more continuously adjustable;

Low-profile: 1Hz ~ 50Hz

IF file: 50Hz ~ 1kHz

High-frequency gear: 1KHz ~ 10kHz

High Frequency file: 10kHz ~ 200kHz

- 3, you can fine-tune the output duty cycle, duty cycle and frequency than separately adjustable duty cycle will change the frequency modulation;

- 4, the output frequency is adjustable;

Cycle $T = 0.7 (R_A + 2R_B) C$

R_A, R_B is adjustable 0-10K;

When the low-profile $C = 0.001\mu\text{F}$;

When IF shift $C = 0.1\mu\text{F}$;

High-frequency gear $C = 1\mu\text{F}$;

When high-frequency gear $C = 100\mu\text{F}$, therefore frequency waveform buyers can own calculations.