

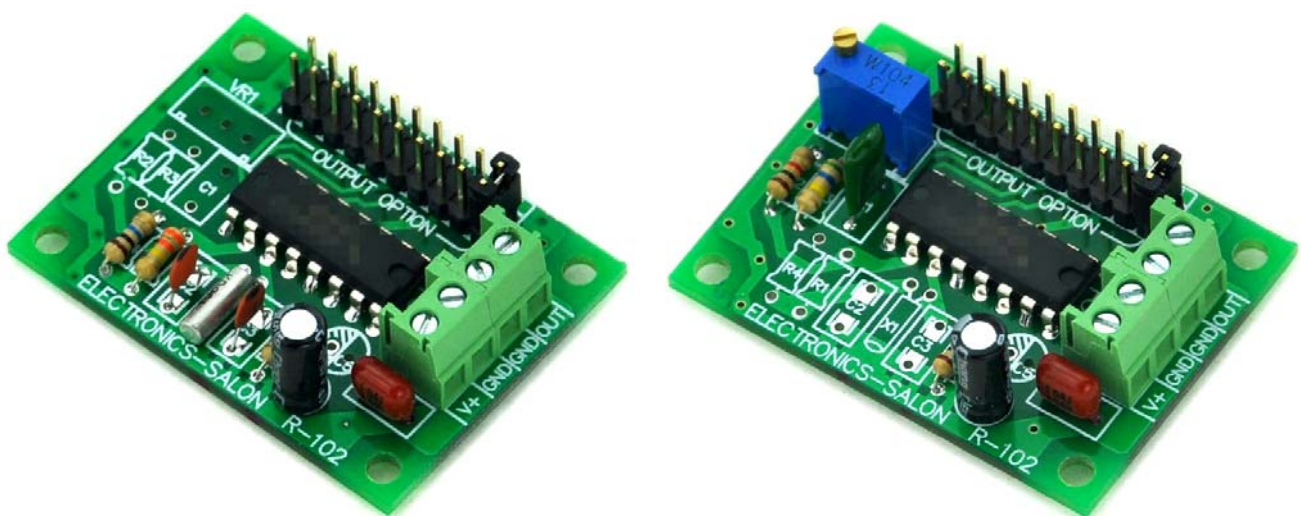
Electronics-Salon

SPECIFICATION

Low Frequency Square Wave Oscillator Module

R-102A (Fixed Frequency Version)

R-102B (Adjustable Frequency Version)



Frequency Range:

- R-102A: 0.068 to 1400 Hz, adjustable.
- R-102B: 2, 4, 8, 32, 64, 128, 256, 512, 1024, 2048 Hz, fixed.

Operating Voltage:

- R-102A: 5 to 12VDC. *
- R-102B: 7 to 15VDC. *

Operating Current (no load):

- R-102A < 5mA, R-102B < 15mA.

Output Duty Cycle: 50% ±5%

Operating Temp. Range: 0 to 70°C.

Accuracy: 20 ppm (R-102A).

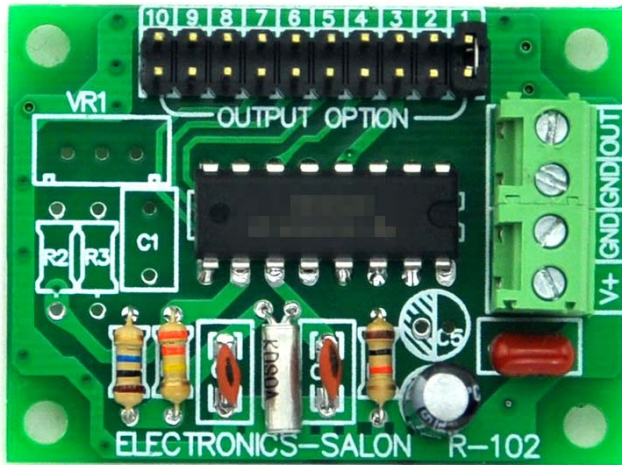
Module Size: W46mm x L34mm x H15mm.

* Must ensure that the voltage stability, recommended to use a voltage regulator module.

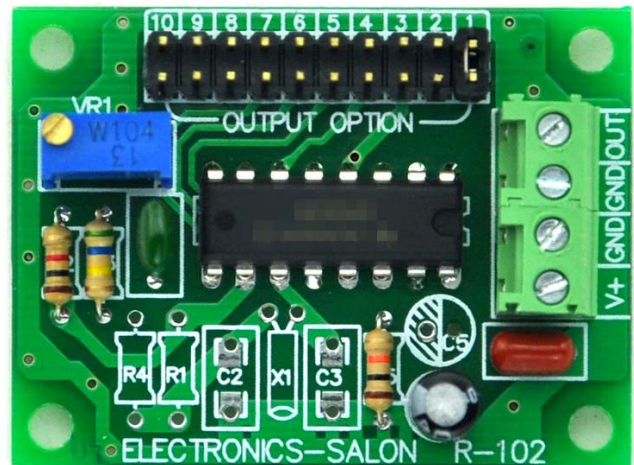
Output Port Characteristics:

Symbol	Parameter	Operating Voltage		
		5V	10V	15V
I _{OL}	Output Low Current, Sink	1mA	2.6mA	6.8mA
I _{OH}	Output High Current, Source	-1mA	-2.6mA	-6.8mA
V _{OL}	Output Voltage Low-Level, no load.	0.05V	0.05V	0.05V
V _{OH}	Output Voltage High-Level, no load.	4.95V	9.95V	14.95V

R-102A



R-102B



Terminal Connection:

OUT: Frequency wave output.

GND: Power supply ground and signal ground.

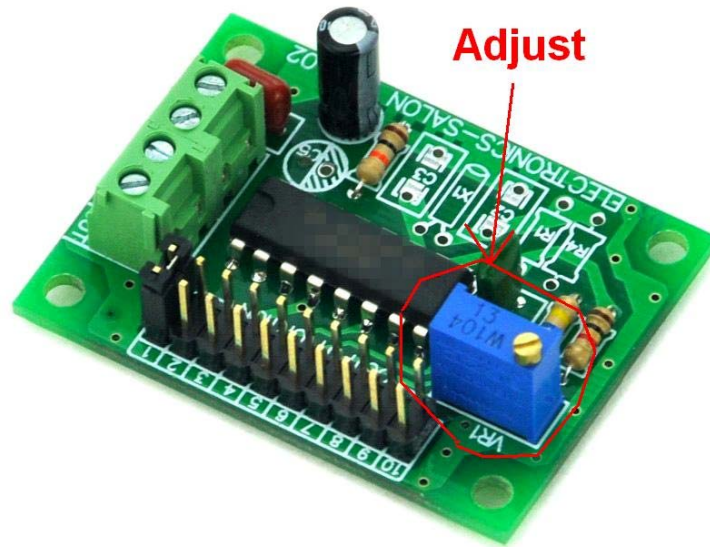
V+: Power supply input.

Output Option:

S – Short, O - Open

Output Option Jumper										R-102A Output	R-102B Output
10	9	8	7	6	5	4	3	2	1	Fixed Frequency	Adjust Range
S	O	O	O	O	O	O	O	O	O	2Hz	0.068 ~ 1.37Hz
O	S	O	O	O	O	O	O	O	O	4Hz	0.136 ~ 2.73Hz
O	O	S	O	O	O	O	O	O	O	8Hz	0.27 ~ 5.47Hz
O	O	O	S	O	O	O	O	O	O	32Hz	1.09 ~ 21.87Hz
O	O	O	O	S	O	O	O	O	O	64Hz	2.18 ~ 43.75Hz
O	O	O	O	O	S	O	O	O	O	128Hz	4.37 ~ 87.5Hz
O	O	O	O	O	O	S	O	O	O	256Hz	8.75 ~ 175Hz
O	O	O	O	O	O	O	S	O	O	512Hz	17.5 ~ 350Hz
O	O	O	O	O	O	O	O	S	O	1024Hz	35 ~ 700Hz
O	O	O	O	O	O	O	O	O	S	2048Hz	70 ~ 1400Hz

About R-102B Frequency Adjust.



The blue VR1 is a 25 turns precision potentiometer, clockwise to adjust the frequency decreases, counterclockwise to adjust the frequency increases.