

DESCRIPTION

These devices consist of two independent, high gain, internally frequency-compensated operational amplifiers designed operate from a single supply over a wide range of voltages. Operation from split supplies also is possible if the difference between the two supplies is 3V to 32V, and V_{CC} is at least 1.5V more positive than the input common-mode voltage, the low supply-current drain is independent of the magnitude of the power supply voltage.

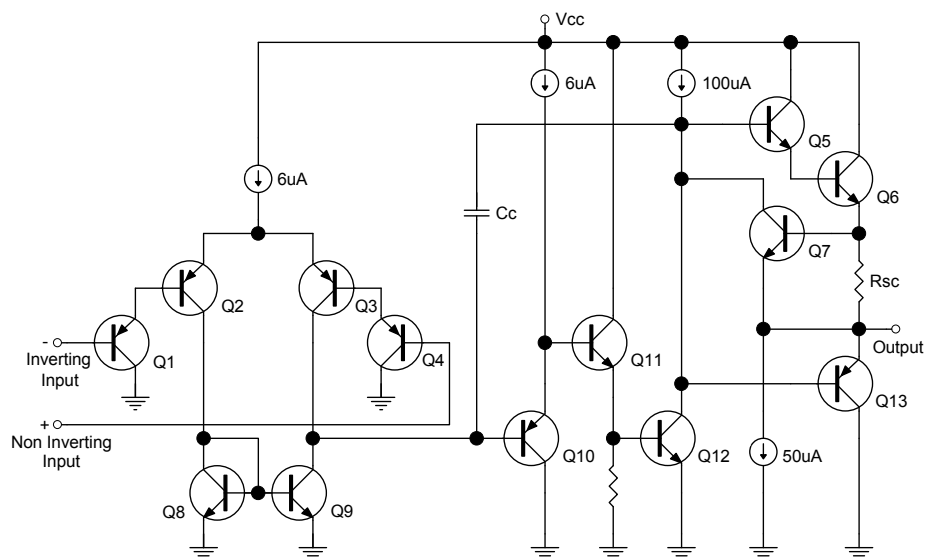
FEATURES

- Two internally compensated OP amps
- Internally frequency compensated for unity gain
- Short circuit protection
- Wide power supply range: $3V_{DC}$ to $32V_{DC}$ (Single supply)
- Input common-mode voltage range includes ground
- Large output voltage swing: $0V_{DC}$ to $V_{CC}-1.5V_{DC}$

APPLICATIONS

- Electronic products
- Power supply
- Remote controller
- Consuming products

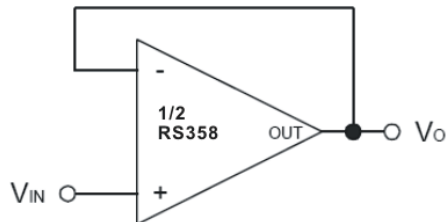
BLOCK DIAGRAM



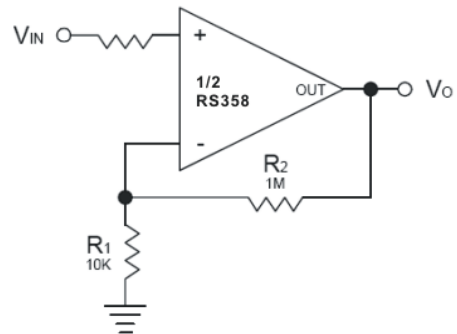


APPLICATION CIRCUIT

Voltage Follower

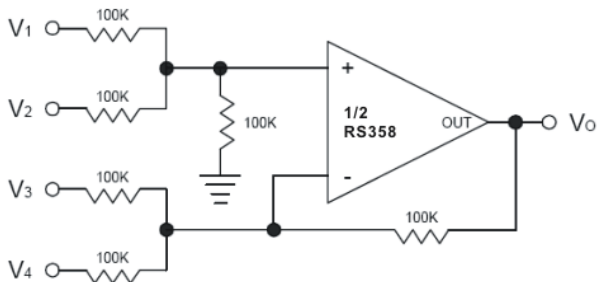


Non Inverting DC Amplifier



$$A_v = 1 + R_2/R_1$$

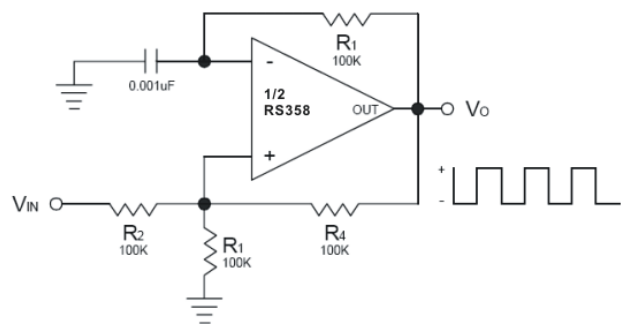
DC Summing Amplifier



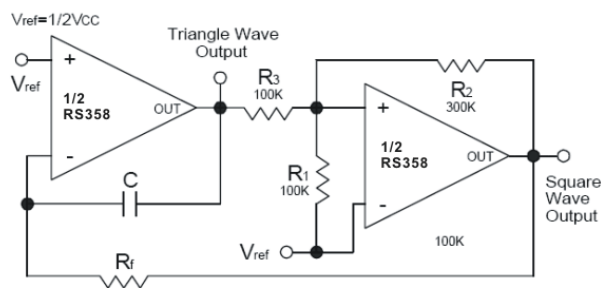
$$V_o = V_1 + V_2 - V_3 - V_4$$

Where $(V_1 + V_2) \geq (V_3 + V_4)$
To keep $V_o \geq 0V$

Squarewave Oscillator



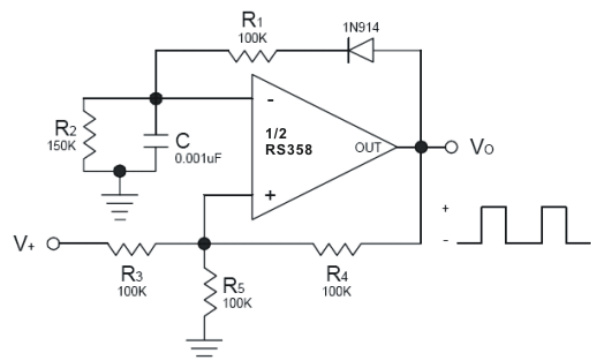
Function Generator



$$F = (R_1 + R_C) / 4CR_1R_2$$

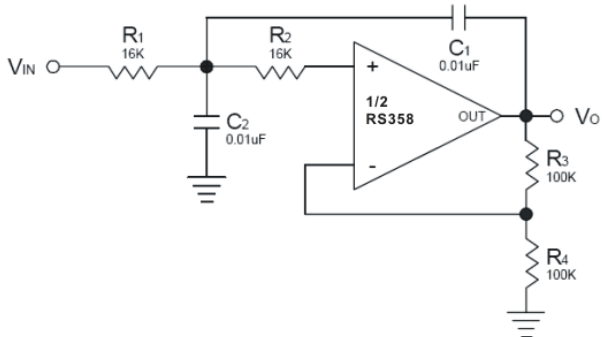
if $R_3 = R_2 * R_1 / (R_2 + R_1)$

Pulse Generator



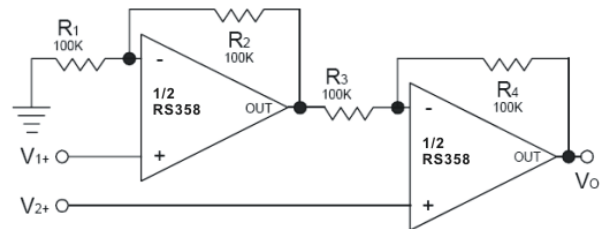
APPLICATION CIRCUIT

DC Coupled Low-Pass RC Active Filter



$$f_0 = 1\text{KHz}, Q=1, A_v=2$$

High Input Z, DC Differential Amplifier

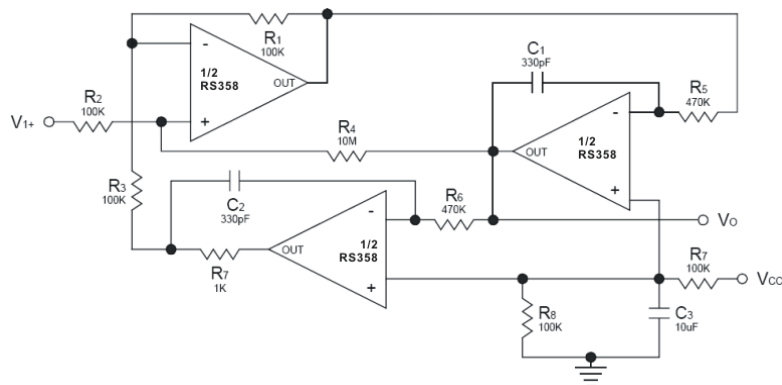


$$R_1/R_2 = R_4/R_3$$

$$V_0 = 1 + R_4/R_3 (V_2 - V_1)$$

As shown $V_0 = 2(V_2 - V_1)$

Active Band-Pass Filter

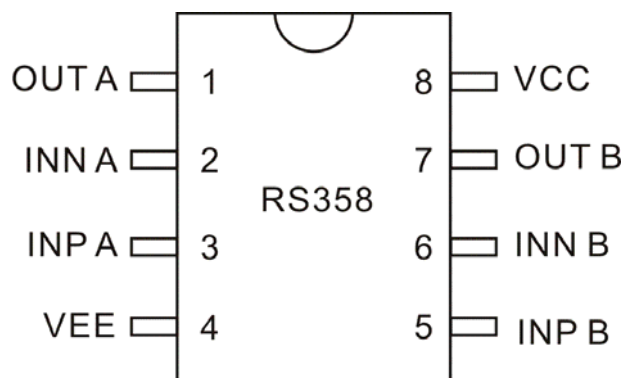


$$f_0 = 1\text{KHz}, Q=50, A_v=100 (40\text{dB})$$

ORDER INFORMATION

Part Number	Package Type
RS358S	8-Pin, SOP, 150mil

PIN CONFIGURATION



PIN DESCRIPTION

Pin Name	Description	Pin No.
OUT A	Output A	1
INN A	Inverting input A (-)	2
INP A	Non inverting input A (+)	3
VEE	Connect to GND or negative voltage.	4
INP B	Non inverting input B (+)	5
INN B	Inverting input B (-)	6
OUT B	Output B	7
VCC	Supply voltage	8



IMPORTANT NOTICE

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