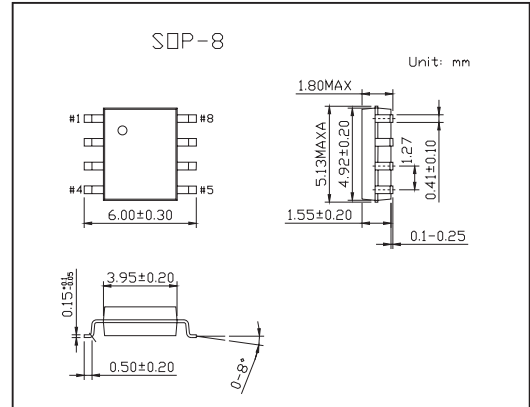
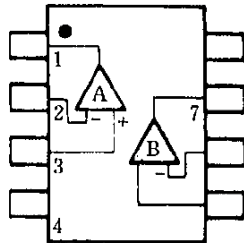


# Single-supply Dual High Current Operational Amplifier

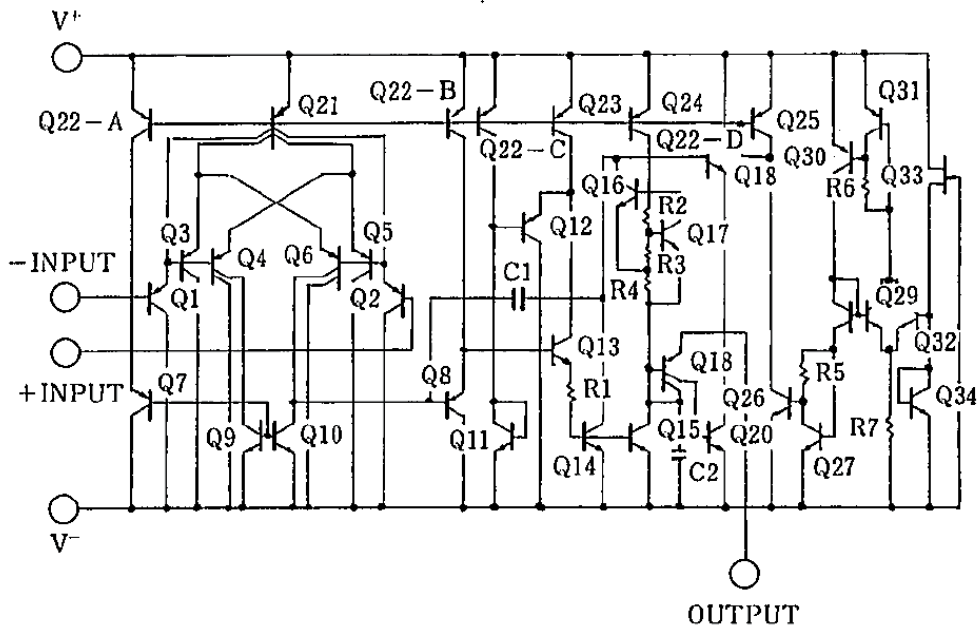
## NJM3414

■ Features

- Single Supply
- Operating Voltage :+3V to 15V
- High Output Current :70 mA
- Slew Rate :1.0V/μs Typ.
- Bipolar Technology



■ Block Diagram



## NJM3414

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Supply Voltage	$V^*(V^+/V^-)$	15V(or $\pm 7.5$ )	V
Differential Input Voltage	$V_{ID}$	15	V
Input Voltage	$V_{IC}$	-0.3 to 15	V
Power Dissipation	PD	800	mW
Operating Temperature Range	$T_{opr}$	-20 to 75	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-40 to 125	$^\circ\text{C}$

### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Input Offset Voltage	$V_{IO}$	$R_S=0\Omega$		2	5	mV
Input Offset Current	$I_{IO}$			5	100	nA
Input Bias Current	$I_B$			100	500	nA
Large Signal Voltage Gain	$A_V$	$R_L=2K\Omega$	88	100		dB
Input Common Voltage Range	$V_{ICM}$		$v+-2$			V
Maximum Output Voltage Swing 1	$V_{OM1}$	$R_L \geq 2K\Omega, V_{+}=5V$	3.5			V
Maximum Output Voltage Swing 2	$V_{OM2}$	$I_O=70mA, V_{+}=5V$	3.2			V
Common Mode Rejection Ratio	CMR		80	90		dB
Common Voltage Rejection Ratio	SVR		80	90		dB
Operating Current	$I_{CC}$	$R_L=\infty$	3	4	5	mA
Slew Rate	SR			1.0		V/MS
Gain Bandwidth Product	GB			1.3		MHz
Operating Voltage Range	$v+$				15	V