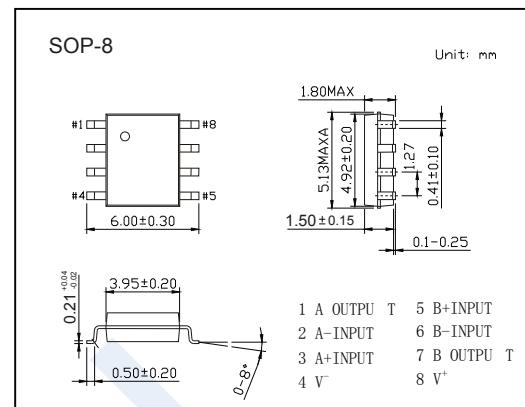
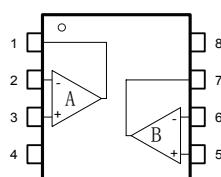


Dual Operational Amplifier

NJM4558 (KJM4558)

■ Features

- High Voltage Gain :100dB typ.
- High Input Resistance: 5MΩ typ.
- Bipolar Technology

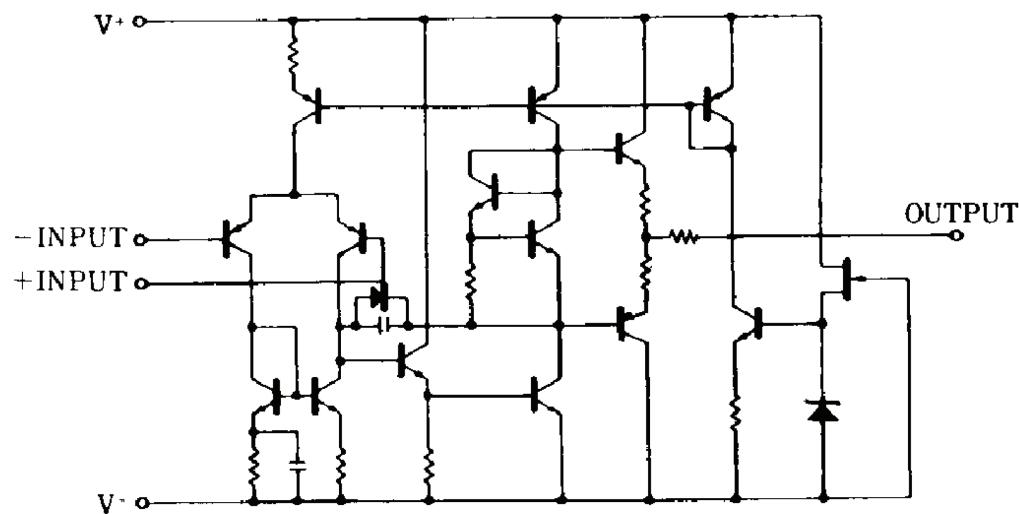


■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|-----------------------------|------------------|-------------|------|
| Supply Voltage | V+/V- | ±18 | V |
| Differential Input Voltage | V _{ID} | ±30 | V |
| Input Voltage | V _{IC} | ±15 * | V |
| Power Dissipation | P _D | 300 | mW |
| Operating Temperature Range | T _{opr} | -40 to +85 | °C |
| Storage Temperature Range | T _{stg} | -40 to +125 | °C |

* For supply voltage less than ±15V, the absolute maximum input voltage is equal to the supply voltage.

■ Equivalent Circuit



NJM4558 (KJM4558)

■ Electrical Characteristics Ta = 25°C, V⁺/V⁻ = ±15V

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|---------------------------------|------------------|--|------|-----|-----|-------|
| Input Offset Voltage | V _{IO} | R _S ≤ 10KΩ | 0.5 | 6 | | mV |
| Input Offset Current | I _{IO} | | 5 | 200 | | nA |
| Input Bias Current | I _B | | 50 | 500 | | nA |
| Input Resistance | R _{IN} | | 0.3 | 5 | | MΩ |
| Large Signal Voltage Gain | A _V | R _L ≥ 2KΩ , V _O = ±10V | 86 | 100 | | dB |
| Maximum Output Voltage Swing 1 | V _{OM1} | R _L ≥ 10KΩ | ±12 | ±14 | | V |
| Maximum Output Voltage Swing 2 | V _{OM2} | R _L ≥ 2KΩ | ±10 | ±13 | | V |
| Input Common Mode Voltage Range | V _{ICM} | | ±12 | 14 | | V |
| Common Mode Rejection Ratio | CMR | R _S ≤ 10KΩ | 70 | 90 | | dB |
| Supply Voltage Rejection Ratio | SVR | R _S ≤ 10KΩ | 76.5 | 90 | | dB |
| Operating Current | I _{CC} | | | 3.5 | 5.7 | mA |
| Slew Rate | SR | | | 1 | | V/uS |
| Equivalent Input Noise Voltage | V _{NI} | RIAA, R _S = 1KΩ , 30kHz | | 1.4 | | uVrms |
| Gain Bandwidth Product | GB | | | 3 | | MHz |