

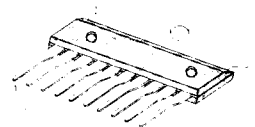
**DUAL POWER OPERATIONAL AMPLIFIER**

The KA9256 is a dual power operational amplifier with an output maximum current of 1.0A ( $V_S = \pm 15V$ ). It can be used as an arm driver for player, a driver for brush motors forward and reverse rotation control and an output driver for a hole motor.

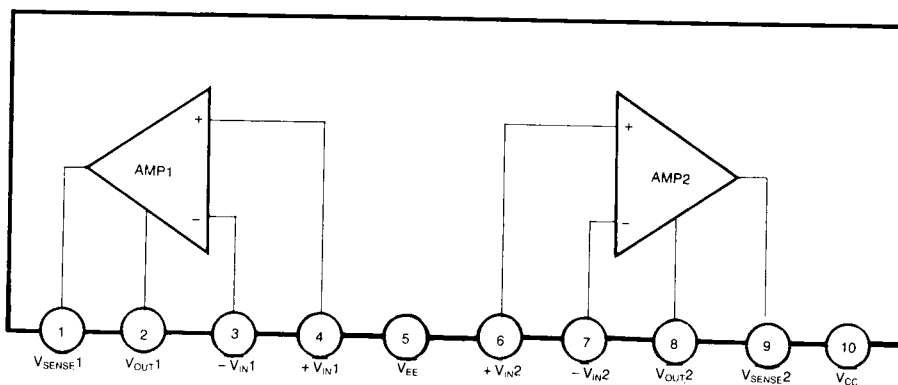
**FEATURES**

- Internal current limiting:  $I_{SC} = 350mA$  ( $R_{SC} = 2.2$ )
- High output current:  $I_O = 500mA$  max
- 10 SIP H/S package
- Internal phase compensation type

10 SIP H/S

**ORDERING INFORMATION**

| Device | Package    | Operating Temperature |
|--------|------------|-----------------------|
| KA9256 | 10 SIP H/S | -25°C ~ +75°C         |

**BLOCK DIAGRAM**

## ABSOLUTE MAXIMUM RATINGS

| Characteristic              | Symbol    | Value      | Unit        |
|-----------------------------|-----------|------------|-------------|
| Supply Voltage              | $V_{CC}$  | $\pm 8$    | V           |
| Output Current              | $I_O$     | 1.0        | A           |
| Power Dissipation           | $P_D$     | 12.5       | W           |
| Operating Temperature Range | $T_{OPR}$ | -25 ~ +75  | $^{\circ}C$ |
| Storage Temperature Range   | $T_{STG}$ | -65 ~ +150 | $^{\circ}C$ |

## ELECTRICAL CHARACTERISTICS

( $V_{CC} = +15V$ ,  $V_{EE} = -15V$ ,  $T_a = 25^{\circ}C$ , unless otherwise specified)

| Characteristic               | Symbol       | Test Conditions  | Min      | Typ      | Max | Unit       |
|------------------------------|--------------|--|----------|----------|-----|------------|
| Input Offset Voltage         | $V_{IO}$     |  |          | 2        | 6   | mV         |
| Input Offset Current         | $I_{IO}$     |  |          | 10       | 200 | nA         |
| Input Bias Current           | $I_{BIAS}$   |  |          | 100      | 700 | nA         |
| Supply Current               | $I_{CC}$     |  |          | 10       | 20  | mA         |
| Output Voltage Swing         | $V_{O(P-P)}$ | $R_L = 33\Omega$   | $\pm 12$ | $\pm 13$ |     | V          |
| Large Signal Voltage Gain    | $A_V$        |  |          | 100      |     | dB         |
| Input Voltage Range          | $V_I$        |  | $\pm 12$ | $\pm 14$ |     | V          |
| Common Mode Rejection Ratio  | CMRR         |  | 70       | 90       |     | dB         |
| Power Supply Rejection Ratio | PSRR         |  |          | 50       | 150 | $\mu V/V$  |
| Bandwidth                    | BW           |  |          | 1.0      |     | MHz        |
| Slew Rate                    | SR           | $A_V = 1$ , $R_L = 33\Omega$ , $R = 10\Omega$ , $C = 0.1\mu F$ |          | 0.15     |     | V/ $\mu S$ |
| Limiting Current             | $I_{LIM}$    | $R_{SC} = 2.2\Omega$   |          | 0.35     |     | A          |
| Cross Talk                   | CT           | $R_L = 33\Omega$ , $V_O = 1V_{P-P}$                            |          | 60       |     | dB         |