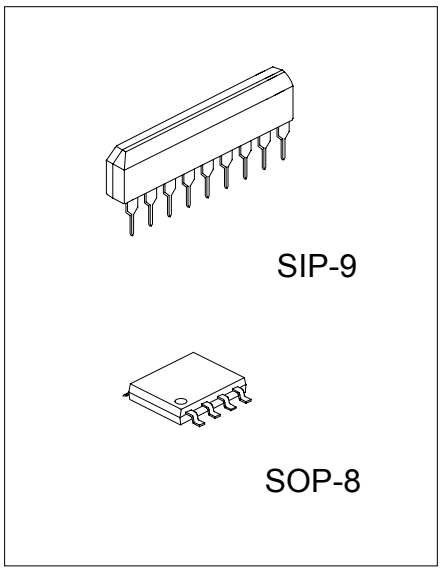
# UTC BA6208 LINEAR INTEGRATED CIRCUIT

## REVERSIBLE MOTOR DRIVER




### DESCRIPTION

The UTC BA6208 is monolithic ICs used for driving reversible motors. They allow control of reversible motors in cassette players and other electrical equipment by using TTL-level logic signals. The ICs contain a logic section, which controls forward and reverse rotations as well as forced stop, and an output power section, which can supply an output current of up to 100mA (typical) according to the logic control.

### FEATURES

*Motor driving power transistors are built in (100mA typically).
*Brake is applied when stopping the motor (when in- puts A and B are both HIGH level).
*Built-in diode to absorb surge currents.
*Very low standby circuit current when inputs A and B are both LOW level.
*Wide range of operating supply voltage (4.5 ~ 15.0V)
*Direct control with the TTL logic.

### ABSOLUTE MAXIMUM RATING (Ta=25°C)

| PARAMETER | SYMBOL | VALUE | UNIT |
|---|---|---|---|
| Power Supply Voltage | Vcc | 18 | V |
| Power Dissipation | Pd | 700 (SIP9) [note 1]<br>450 (SOP8) [note 2] | mW<br>mW |
| Operating Temperature | Topr | -20 to +60 | °C |
| Storage Temperature | Tstg | -55 to +125 | °C |
| Maximum Output Current | Iout | 500 | mA |

Note 1: Reduced by 7mW for each increase in Ta of 1°C over 25°C.

Note 2: Reduced by 4.5mW for each increase in Ta of 1°C over 25°C.

### RECOMMENDED OPERATING CONDITIONS (Ta=25°C)

| PARAMETER | SYMBOL | MIN | TYP | MAX | UNIT |
|---|---|---|---|---|---|
| Power Supply Voltage | Vcc | 4.5 | | 15 | V |

INPUT TRUTH TABLE

| 3pin (Ain) | 2pin (Bin) | 8pin (Aout) | 7pin (Bout) |
|---|---|---|---|
| H | L | H | L |
| L | H | L | H |
| H | H | L | L |
| L | L | OPEN | OPEN |

Note: HIGH level input is 2.0V or more.
LOW level input is 0.8V or less.

ELECTRICAL CHARACTERISTICS (Ta=25°C, $V_{CC}$=9V, unless otherwise specified)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|---|---|---|---|---|---|---|
| Output Current | $I_O$ | | 200 | | | mA |
| Output Saturation Voltage | $V_{CE}$ | Io=100mA | | | 1.6 | V |
| Input High Level Voltage | $V_{IH}$ | | 2.0 | | | V |
| Input Low Level Voltage | $V_{IL}$ | | | | 0.8 | V |
| Standby Supply Current | $I_{ST}$ | When inputs A and B are both Low level | | | 0.4 | mA |
| Input High Level Current | $I_{IH}$ | $V_{IH}$ =4.5V | | | 400 | μA |

Note: A diode that absorbs at least 500mA is built in to give protection against surge currents with a pulse width of 10 ms and a duty ratio of 10% or less.

TEST CIRCUIT