## REVERSIBLE MOTOR DRIVER

## - DESCRIPTION

The UTC BA6208 is designed for driving reversible motor use, it contain a logic section to controls forward and reverse rotations as well as forced stop, and an output power section is able to supply an output current of up to 100 mA (typical) according to the logic control.

The IC allow control of reversible motors in cassette players and other electrical equipment by using TTL-level logic signals.

## - FEATURES

* Recommended operating supply voltage range from 4.5V to15.0V.
* Built-in motor driving power transistors(typ.100mA).
* Brake is applied when stopping the motor (when Ain and Bin are both HIGH level).

* Very low standby circuit current(when Ain and Bin are both LOW level.
* Built-in diode to absorb surge currents.
* Direct control with the TTL logic.


## ■ ORDERING INFORMATION

| Ordering Number |  | Package | Packing |
| :---: | :---: | :---: | :---: |
| Lead Free | Halogen Free |  |  |
| BA6208L-AG6-R | BA6208G-AG6-R | SOT-26 | Tape Reel |
| BA6208L-D08-T | BA6208G-D08-T | DIP-8 | Tube |
| BA6208L-G09-T | BA6208G-G09-T | SIP-9 | Tube |
| BA6208L-S08-R | BA6208G-S08-R | SOP-8 | Tape Reel |
| BA6208L-SM1-R | BA6208G-SM1-R | MSOP-8 | Tape Reel |

(1) R: Tape Reel, T: Tube
(2) AG6: SOT-26, D08: DIP-8, G09: SIP-9, S08: SOP-8, SM1: MSOP-8
(3) G: Halogen Free and Lead Free, L: Lead Free

- MARKING

| SOT-26 | DIP-8 |
| :---: | :---: |
|  |  |
| SOP-8 | SIP-9 |
|  |  |

- PIN CONFIGURATION

- ABSOLUTE MAXIMUM RATING ( $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}$, unless otherwise specified)

| PARAMETER |  | SYMBOL | RATINGS | UNIT |
| :---: | :---: | :---: | :---: | :---: |
| Power Supply Voltage |  | Vcc | 18 | V |
| Maximum Output Current |  | Iout(MAX) | 500 | mA |
| Power Dissipation | SOT-26 | PD | 300 | mW |
|  | DIP-8 |  | 500 | mW |
|  | SIP-9 |  | 700 | mW |
|  | SOP-8 |  | 450 | mW |
|  | MSOP-8 |  | 300 | mW |
| Operating Temperature |  | Topr | $-20 \sim+60$ | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature |  | TSTG | $-55 \sim+125$ | ${ }^{\circ} \mathrm{C}$ |

Note Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.
■ INPUT TRUTH TABLE

| Ain | Bin | Aout | Bout |
| :---: | :---: | :---: | :---: |
| $H$ | $L$ | $H$ | $L$ |
| $L$ | $H$ | $L$ | $H$ |
| $H$ | $H$ | $L$ | $L$ |
| $L$ | $L$ | OPEN | OPEN |

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

- ELECTRICAL CHARACTERISTICS ( $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}, \mathrm{V}_{\mathrm{C}}=9 \mathrm{~V}$, unless otherwise specified)

| PARAMETER |  | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Output Saturation Voltage |  | $V_{\text {ce }}$ | lout $=100 \mathrm{~mA}$ |  |  | 1.6 | V |
| Input Level Voltage | High | $\mathrm{V}_{\text {IH }}$ |  | 2.0 |  |  | V |
|  | Low | $\mathrm{V}_{\text {IL }}$ |  |  |  | 0.8 | V |
| Output Current |  | Iout |  | 200 |  |  | mA |
| Standby Supply Current |  | Ist | Ain=Low, Bin= Low |  |  | 0.4 | mA |
| Input High Level Current |  | $\mathrm{IIH}^{\text {H}}$ | $\mathrm{V}_{\mathrm{IH}}=4.5 \mathrm{~V}$ |  |  | 400 | $\mu \mathrm{A}$ |

Note: A diode that absorbs at least 500 mA 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


Note: ( ): pin number of 8 pins package.

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