



## BA6208

## LINEAR INTEGRATED CIRCUIT

### REVERSIBLE MOTOR DRIVER

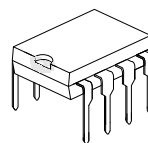
#### DESCRIPTION

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 100mA (typical) according to the logic control.

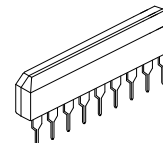
The IC allow control of reversible motors in cassette players and other electrical equipment by using TTL-level logic signals.

#### FEATURES

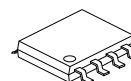
- \* Recommended operating supply voltage range from 4.5V to 15.0V.
- \* Built-in motor driving power transistors (typ. 100mA).
- \* Brake is applied when stopping the motor (when Ain and Bin are both HIGH level).
- \* Very low standby circuit current (when Ain and Bin are both LOW level).
- \* Built-in diode to absorb surge currents.
- \* Direct control with the TTL logic.



DIP-8



SIP-9



SOP-8

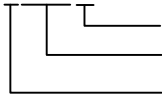


MSOP-8

#### ORDERING INFORMATION

Ordering Number		Package	Packing
Lead Free	Halogen Free		
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

BA6208L-D08-T



- (1) Packing Type
- (2) Package Type
- (3) Green Package

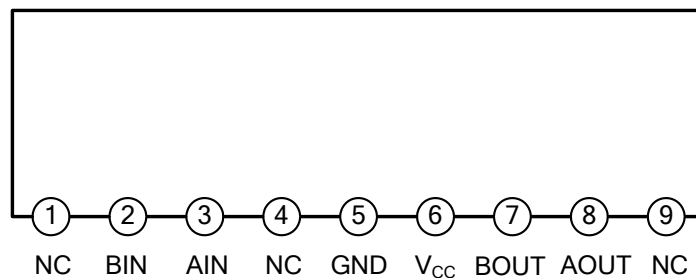
- (1) T: Tube, R: Tape Reel
- (2) D08: DIP-8, G09: SIP-9, S08: SOP-8, SM1: MSOP-8
- (3) G: Halogen Free and Lead Free, L: Lead Free

#### MARKING

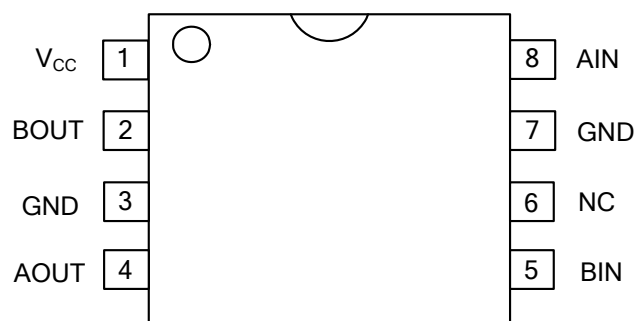
DIP-8	SIP-9	SOP-8
<p>UTC □ □ □ □ BA6208 □ □ □ □ □ □</p> <p>→ Date Code → L: Lead Free → G: Halogen Free → Lot Code</p>	<p>UTC □ □ □ □ BA6208 □ □ □ □ □ □</p> <p>→ Data Code → L: Lead Free → G: Halogen Free → Lot Code</p>	<p>UTC □ □ □ □ BA6208 □ □ □ □ □ □</p> <p>→ Date Code → L: Lead Free → G: Halogen Free → Lot Code</p>

## ■ PIN CONFIGURATION

For SIP-9 Package



For SOP-8/DIP-8/MSOP-8 Package



■ ABSOLUTE MAXIMUM RATING ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Power Supply Voltage		$V_{CC}$	18	V
Maximum Output Current		$I_{OUT(MAX)}$	500	mA
Power Dissipation	DIP-8	$P_D$	500	mW
	SIP-9		700	mW
	SOP-8		450	mW
	MSOP-8		300	mW
Operating Temperature		$T_{OPR}$	$-20 \sim +60$	$^{\circ}\text{C}$
Storage Temperature		$T_{STG}$	$-55 \sim +125$	$^{\circ}\text{C}$

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 2.0V or more.

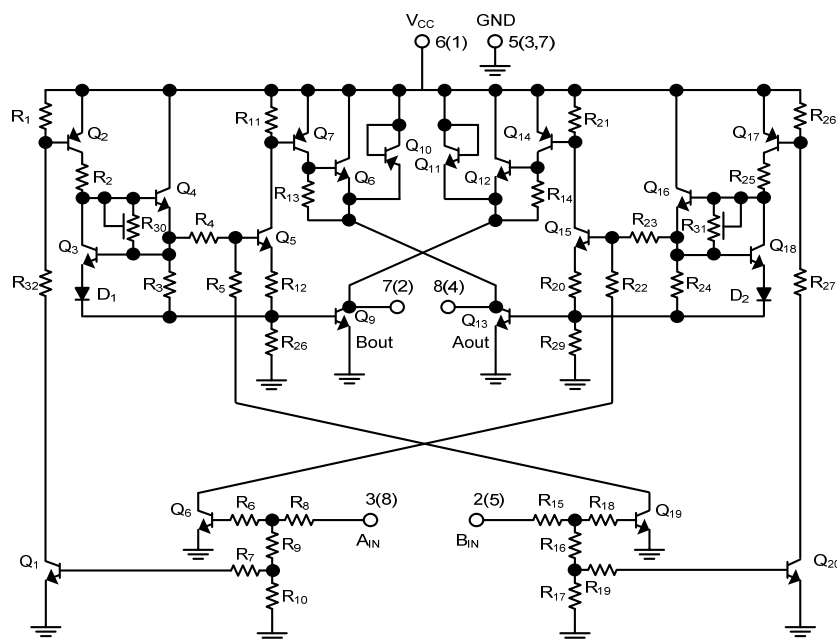
LOW level input is 0.8V or less.

■ ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ ,  $V_{CC}=9\text{V}$ , unless otherwise specified)

PARAMETER		SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Output Saturation Voltage		$V_{CE}$	$I_{OUT}=100\text{mA}$			1.6	V
Input Level Voltage	High	$V_{IH}$		2.0			V
	Low	$V_{IL}$				0.8	V
Output Current		$I_{OUT}$		200			mA
Standby Supply Current		$I_{ST}$	Ain=Low, Bin= Low			0.4	mA
Input High Level Current		$I_{IH}$	$V_{IH}=4.5\text{V}$			400	$\mu\text{A}$

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



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

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