



SSC6208

Reversible Motor Driver

➤ Features

- Built-in Motor Driving Power Transistors (Typ. 100mA)
- Brake is Applied When Stopping the Motor (When Input A and B are Both HIGH Level)
- Built-in Diode to Absorb Surge Currents
- Very Low Standby Circuit Current When Input A and B are Both LOW Level
- Wide Range of Operating Supply Voltage (4.5 to 18.0V)
- Direct Control with the TTL Logic

➤ Description

The SSC6208 is a monolithic integrated circuit used for driving reversible motors. It can control reversible motors in cassette players and other electrical equipment by using TTL-level logic signals. The IC contains 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 (Typ.) according to the logic control. The SSC6208 is available in SOP-8 and SOT23-6L Package.

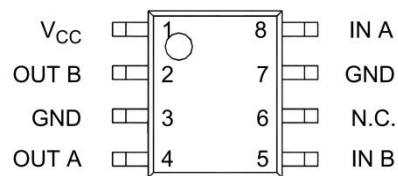
➤ Applications

- DVD Player
- Bi-directional motors for other electronic equipment

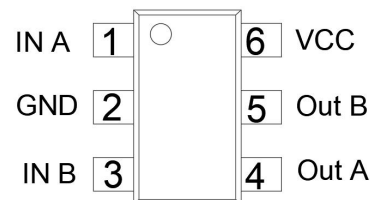
➤ Ordering Information

Device	Package	Shipping
SSC6208GS1	SOP8	2500/Reel
SSC6208GSB	SOT23-6L	3000/Reel

➤ Pin configuration

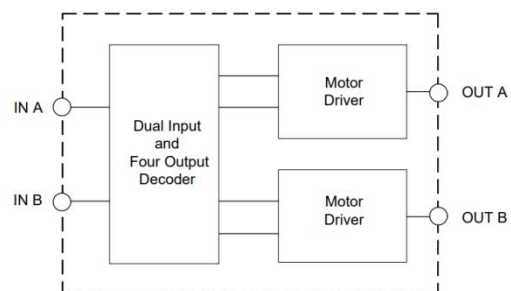


SOP8(Top view)

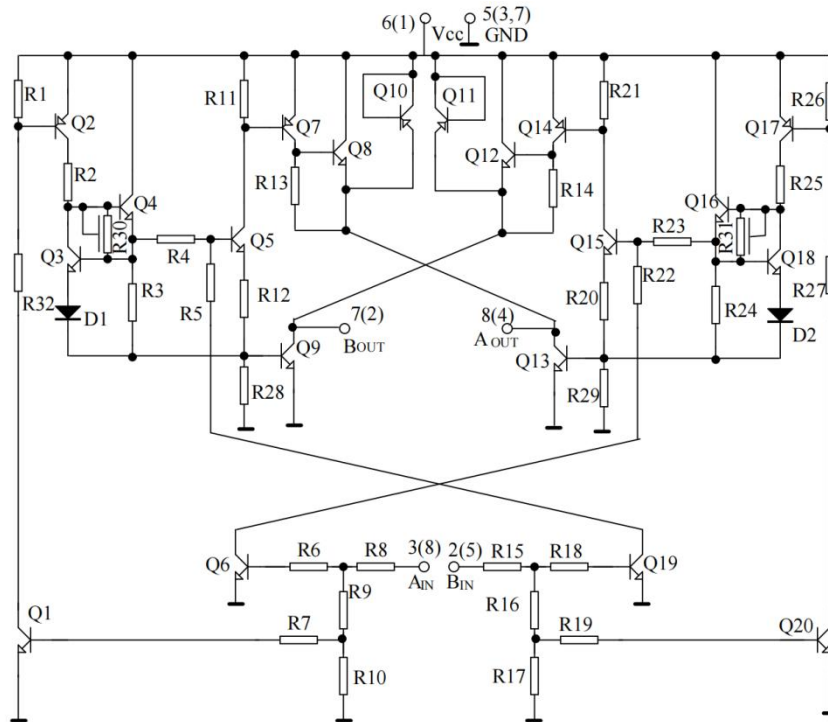


SOT23-6L (Top view)

➤ Functional Block Diagram



➤ **Internal Circuit Configuration**



Note: Internal Circuit Configuration of SSC6208(Figures in parentheses are for Sop8 package)

➤ **Pin Descriptions**

Pin NO.		Pin Name	
SOP8	SOT23-6		
1	6	Vcc	Supply Voltage
2	5	Bout	Output B
3	2	GND	Ground
4	4	Aout	Output A
5	3	Bin	Input B
6		NC	Nothing Connected
7		GND	Ground
8	1	Ain	Input A



➤ **Marking Information**

Marking	Package	Designator	Description
	SOP8	SSC	Logo
		6208	Product model
	SOT23-6L	XXYY	XX: year:23 Y: week:01~52 Y: Lot

➤ **Absolute Maximum Ratings**($T_A=25^{\circ}\text{C}$ unless otherwise noted)⁽¹⁾

Symbol	Parameter	Ratings	Unit
V_{CC}	Supply Voltage	22	V
I_{OUT}	Maximum Motor Current	500	mA
P_D	Maximum power dissipation	SOP8 ⁽²⁾	450
		SOT23-6 ⁽³⁾	220
T_A	Operating Ambient temperature	-20 to 60	$^{\circ}\text{C}$
T_{STG}	Storage temperature range	-55 to 125	$^{\circ}\text{C}$

Note (1): Stresses greater than those listed under "Absolute Maximum Ratings" may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated under "Recommended Operating Conditions" is not implied. Exposure to "Absolute Maximum Ratings" for extended periods may affect device reliability.

Note (2): Power dissipation is reduced by 4.5mW for each increase in T_A of 1°C over 25°C

Note (3): Power dissipation is reduced by 2.5mW for each increase in T_A of 1°C over 25°C

➤ **Recommended Operating Conditions**

Symbol	Parameter	Min	Max	Unit
V_{CC}	Supply Voltage	4.5	18	V
T_A	Operating Temperature	0	70	$^{\circ}\text{C}$



➤ **Electronics Characteristics**($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Test Conditions	Min	Typ.	Max	Unit
I_o	Output Current		200			mA
$V_{CE(SAT)}$	Output Saturation Voltage	$I_o=100\text{mA}$		1.0	1.6	V
V_{IH}	Input High Level Voltage		2.0			V
V_{IL}	Input Low Level Voltage				0.8	V
I_{ST}	Standby Supply Current	When input A and B are both low level			0.4	mA
I_{IH}	Input High Level Current	$V_{IH}=4.5\text{V}$		250	400	μA

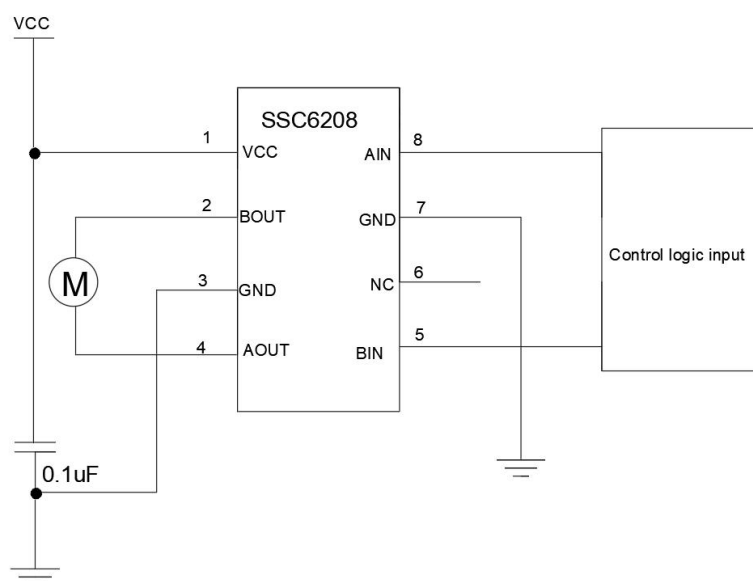
➤ **Input and Output Truth Table** (4)

IN A	IN B	OUT A	OUT B
H	L	H	L
L	H	L	H
H	H	L	L
L	L	OPEN	OPEN

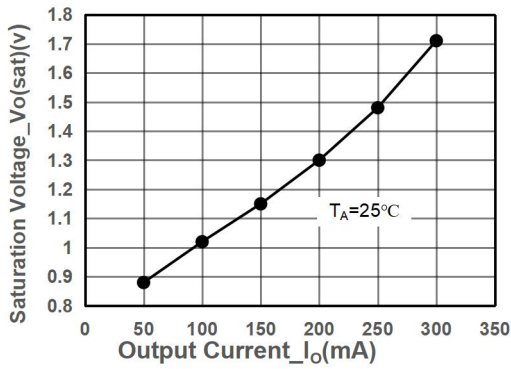
Note (4): High level input is 2.0V or more. Low level input is 0.8V or less.

➤ **Typical Application**

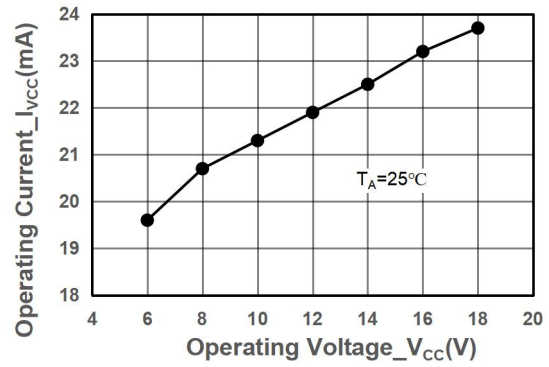
SOP8



➤ Typical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)



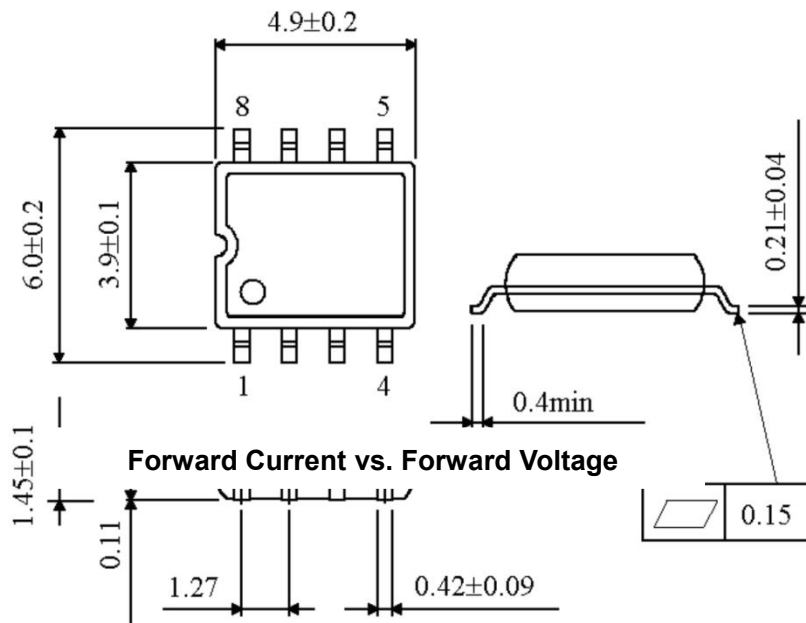
Saturation Voltage vs. Output Current



Operating Voltage vs. Operating Current

➤ Package Information

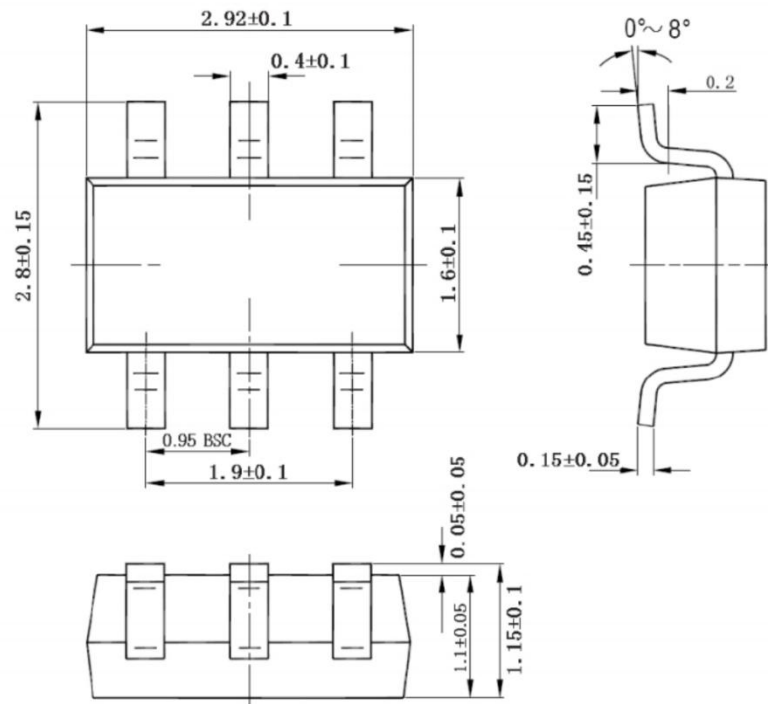
Package : SOP8



Forward Current vs. Forward Voltage



Package : SOT23-6L





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