

## 1.0A, 4.0-32.0V H-Bridge Driver

### Description

The SA9120 is single channel H-Bridge driver IC with integrated diodes for motor application, it provides integrated motor-driver solution for robotics, consumer products and other low voltage or battery-powered motion control applications.

The SA9120 maximum operational voltage is 32.0V. It can supply up to 1.0A of output continuous current and 2.0A of output peak current. There is internal shutdown function for over-temperature protection.

Package material is Pb-Free Product & RoHS compliant for the purpose of environmental protection and for sustainable development of the earth.

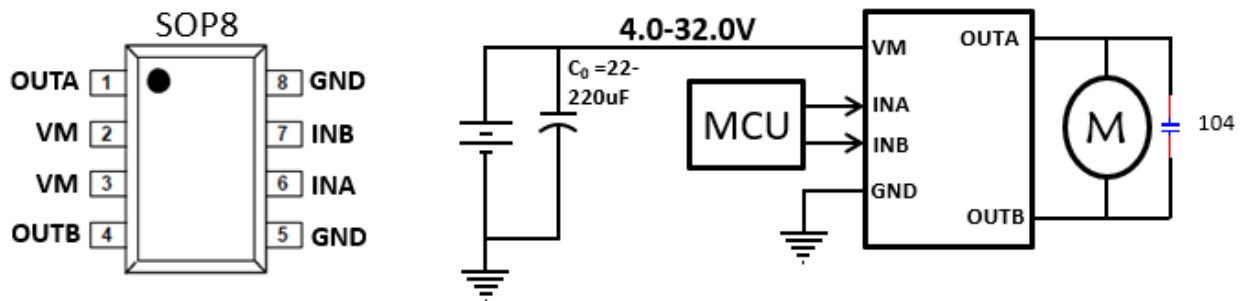
### Features

- Operation voltage up to 32V
- Continuous current output up to 1.0A
- Peak current up to 2.0A
- $R_{DS(ON)}$  850-m $\Omega$  (HS + LS)
- Over temperature protection
- Over current protection
- Under-Voltage Lockout Protection
- Low standby current
- Low quiescent current
- SOP8 package

### Application

- Robotics (R/C servo, Sweeping robot)
- Toys (R/C car, R/C aircraft)
- Any relevant DC motor applications

## SA9120 Package & Simplified Application



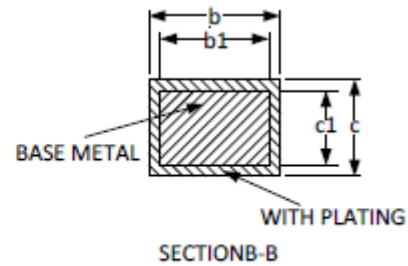
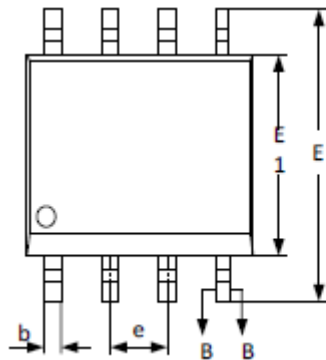
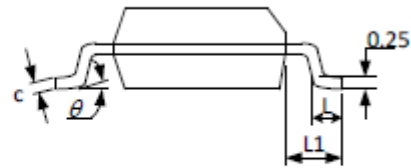
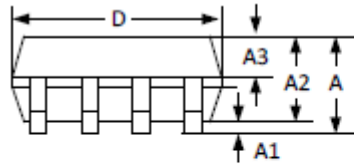
### Device Information

Part No.	Package	Quantity	Operation Temp. $T_A$
SA9120	SOP8	4000	-40~85 °C

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### Package

#### SOP8



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	--	--	1.77
A1	0.08	0.18	0.28
A2	1.20	1.40	1.60
A3	0.55	0.65	0.75
b	0.39	--	0.48
b1	0.38	0.41	0.43
c	0.21	--	0.26
c1	0.19	0.20	0.21
D	4.70	4.90	5.10
E	5.80	6.00	6.20
E1	3.70	3.90	4.10
e	1.27BSC		
L	0.50	0.65	0.80
L1	1.05BSC		
θ	0	--	8°

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