

## 250V High Side & Low Side Gate Drive IC

### Description

The SA2103 is a high voltage, high speed power MOSFET driver with independent high and low side referenced output channels based on P<sub>SUB</sub> P<sub>EPI</sub> process. The floating channel can be used to drive an N-channel power MOSFET in the high side configuration which operates up to 250V. Logic inputs are compatible with standard CMOS or LS TTL output, down to 3.3V logic.

The SA2103 output drivers feature a high pulse current buffer stage designed for minimum driver cross-conduction. Propagation delays are matched to simplify use in high frequency applications.

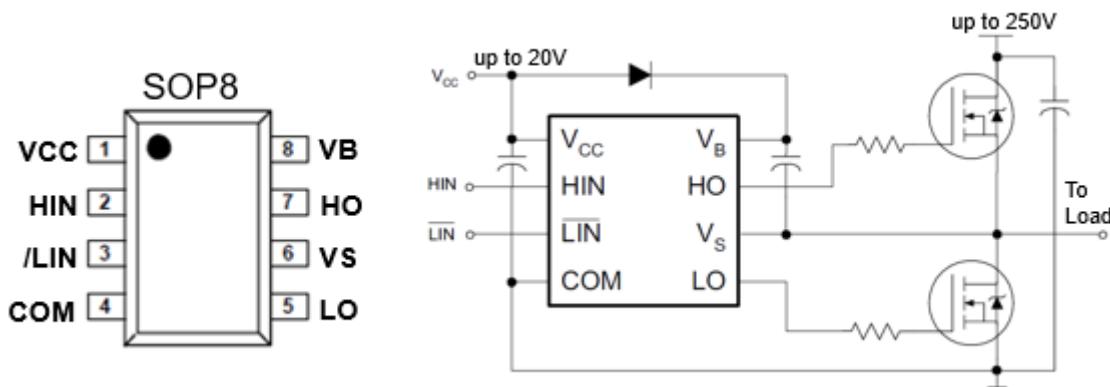
### Features

- Fully operational to 250V
- 3.3/5/15V input logic compatible
- VCC range from 10V to 20V
- 1.0A/1.5A(typ.) current capability
- Deadtime 200ns (typ.)
- UVLO for VCC and VBS
- Tolerant to negative transient voltage
- Matched propagation delay
- SOP8 package available

### Application

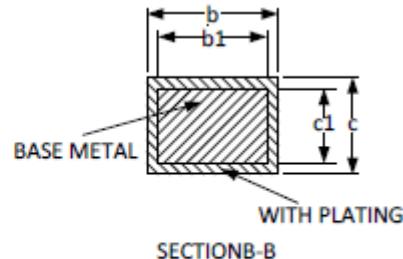
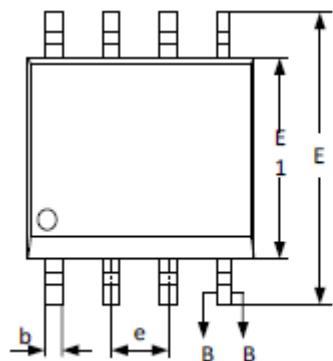
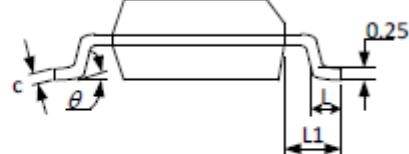
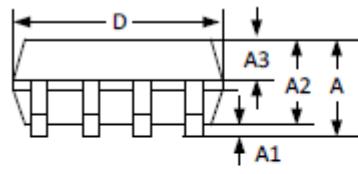
- Power Motor Driver
- Half-Bridge Power Converters
- Full-Bridge Power Converters

## SA2103 Package & Simplified Application



### Order Information

Part No.	Package	Quality	Operation Temp T <sub>A</sub> .
SA2103	SOP8	4000	-40~125 °C

**250V High Side & Low Side Gate Drive IC**
**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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