

## Linear Hall Effect Sensor IC

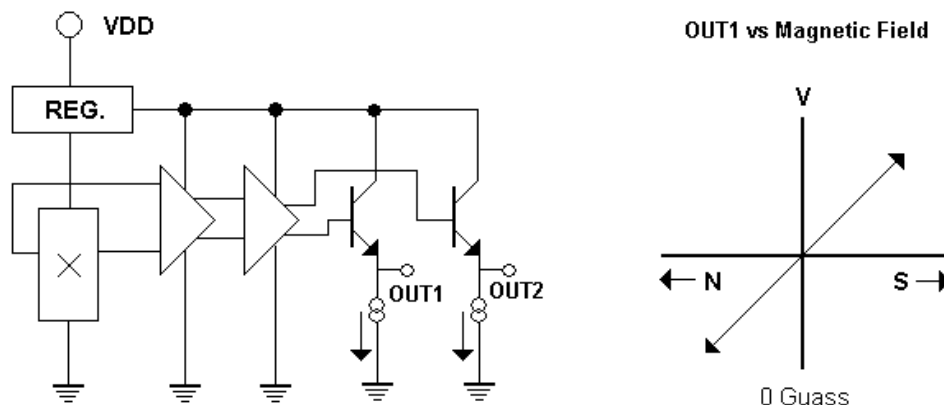
### Features:

- Wide operating range 2.2~12V, -20°C~100°C
- Flat Response to 16kHz
- Low operating current 3mA
- High Sensitivity on different supplied voltage  
Sensitivity: 10mV/Guass (Differential output) on 3V  
Sensitivity: 20mV/Guass (Differential output) on 5V
- Two package styles TO-94/SOT-25 available.

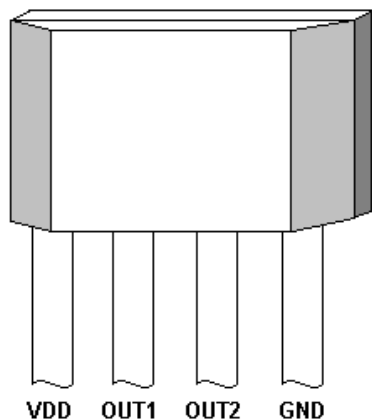
### Functional Description :

The W201 integrates Hall sensing element, linear amplifier, sensitivity controller and emitter follower output stage. It accurately tracks extremely small change in magnetic flux density –generally too small to operate Hall effect switch.

W201 can be applied as current sensor, tooth sensor, proximity detectors and motion detectors. As sensitive monitor of magnetic flux, it can effectively measure a system's performance with negligible system loading while providing isolation from contaminated and electrically noisy environments.

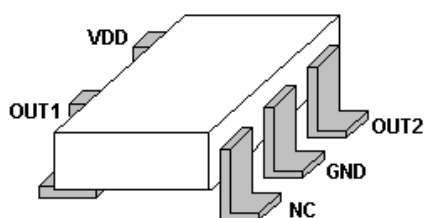


Winson reserves the right to make changes to improve reliability or manufacturability.



### ABSOLUTE MAXIMUM RATING

Supply Voltage, Vdd	14V
Magnetic Flux Density, B	Unlimited
Output Driving Current, Iout	5mA
Operating Temperature Range	
Ta	-20°C to +100°C
Storage Temperature Range	
Ts	-65°C to +150 °C
Power Dissipation Pd	
TO-94	450mW
SOT-25	350mW



### ORDER INFORMATION

WSH201-XPAN	TO-94
WSH201-XPDN	SOT-25

### Electrical Characteristics:

(T=+25°C, Vdd=5.0V)

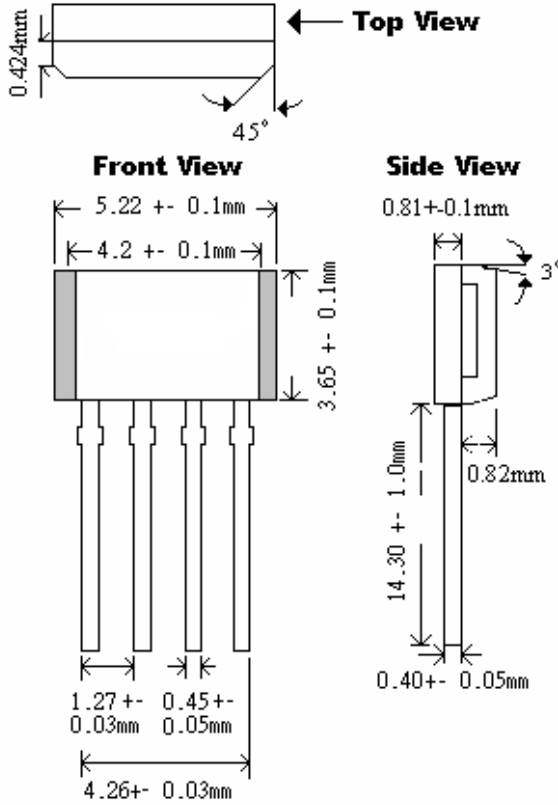
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Units
Supply Voltage	Vcc	—	2.2	—	12	V
Supply Current	Isupply	B=0 Guass	—	3.25	5.0	mA
Quiescent Vout	Vout	B=0 Guass	2.0	2.25	2.5	V
Sensitivity (Single Ended)	$\Delta V_{out}$	B= 0 to $\pm 50$ G	7.0	10.0	13.0	mV/G
Sensitivity (Differential)	$\Delta V_{out}$	B= 0 to $\pm 50$ G	15.0	20.0	25.0	mV/G
Bandwidth	BW		—	16	—	kHz
Measurable Range	MR		—	$\pm 100$	—	Guass
Input Impedence	Rin	B=0 Guass	—	3.3	—	k $\Omega$

All output-voltage measurements are made with a voltmeter having an input impedance of at least 100k $\Omega$

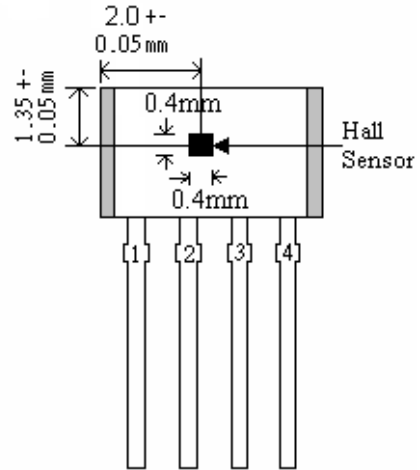
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Package Information:

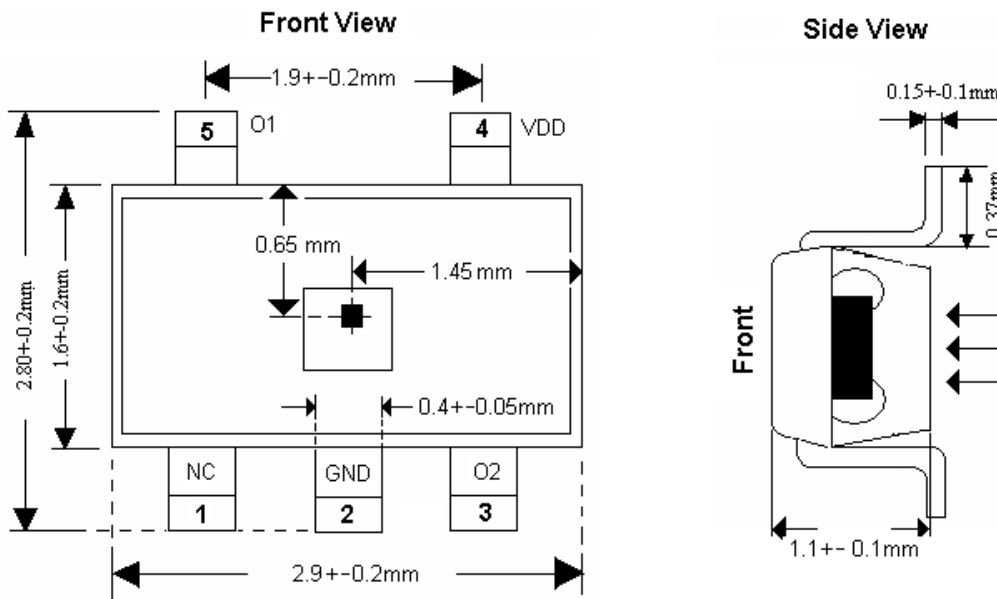
**TO94:**



**Hall Sensor Location**



**SOT-25:**



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Additional Information :

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