

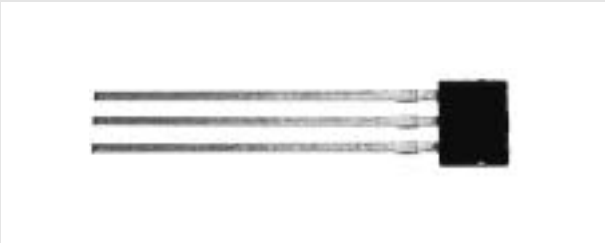
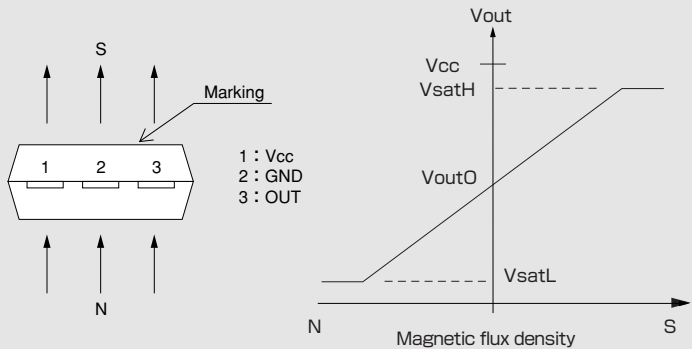


# EQ-711L

Shipped in bulk(500pcs/Pack)

EQ-711L is composed of an InAs Quantum Well Hall Element and a signal processing IC chip in a package  
Notice:It is requested to read and accept "IMPORTANT NOTICE" written on the back of the front cover of this catalogue.

### ●Operational Characteristics

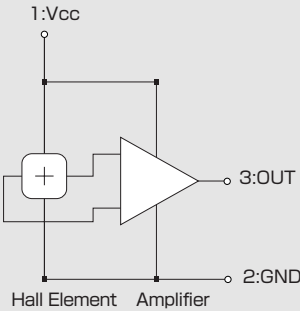


### ●Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limit	Unit
Supply Voltage	V <sub>CC</sub>	6	V
Output Current	I <sub>out</sub>	±1.2 <sup>(*)</sup>	mA
Operating Temperature Range	T <sub>opr</sub>	−30 ~ 100	°C
Storage Temperature Range	T <sub>stg</sub>	−40 ~ 125	°C

(\*) V<sub>CC</sub>=5V

### ●Functional Block Diagram



### ●Magnetic and Electrical Characteristics (Ta=25°C Vcc=5V)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	V <sub>CC</sub>		3	5	5.5	V
Supply Current	I <sub>CC</sub>			9	12	mA
Offset Voltage	V <sub>out0</sub>		2.35	2.5	2.65	V
Magnetic Sensitivity	V <sub>H</sub>	B=25mT	50	65	80	mV/mT
Output Saturation Voltage 1 <sup>(*)</sup>	V <sub>satH</sub>	I <sub>out</sub> =−0.5mA	V <sub>CC</sub> −0.3		V <sub>CC</sub>	V
Output Saturation Voltage 2 <sup>(*)</sup>	V <sub>satL</sub>	I <sub>out</sub> =0.5mA	0		0.3	V
Output Bandwidth <sup>(*)</sup>	f <sub>T</sub>	10% decrease frequency		100		kHz
Response Time <sup>(*)</sup>	T <sub>r</sub>	90% arrival		3	5	μsec
Temp. coefficient of V <sub>H</sub> <sup>(**)</sup>	αV <sub>H</sub>	The maximum error from room temperature	−5	0	5	%
Temp. coefficient of V <sub>out0</sub> <sup>(**)</sup>	αV <sub>out0</sub>	Ta=−30~100°C least squares approximation	−0.5	0	0.5	mV/°C

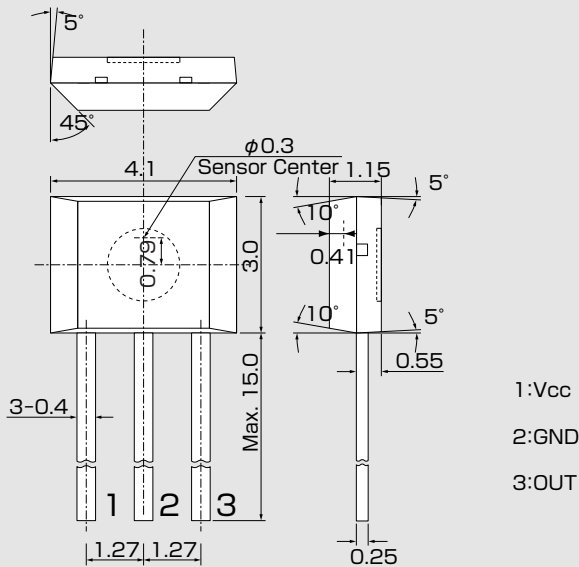
(\*) : design targets  
(\*\*) : for reference only

1 [mT]=10 [Gauss]

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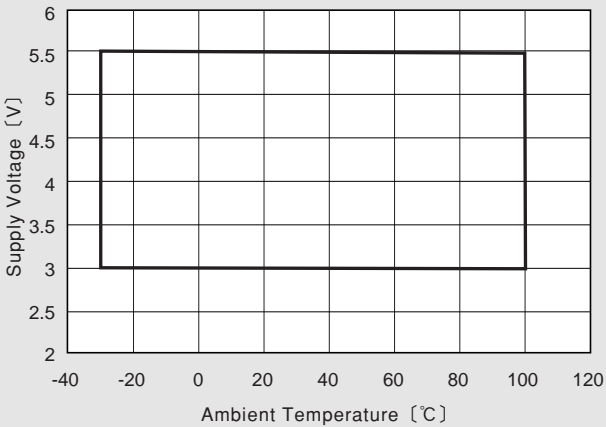
•This product contains gallium arsenide(GaAs).Handling and discarding precautions required.

●Package (Unit:mm)

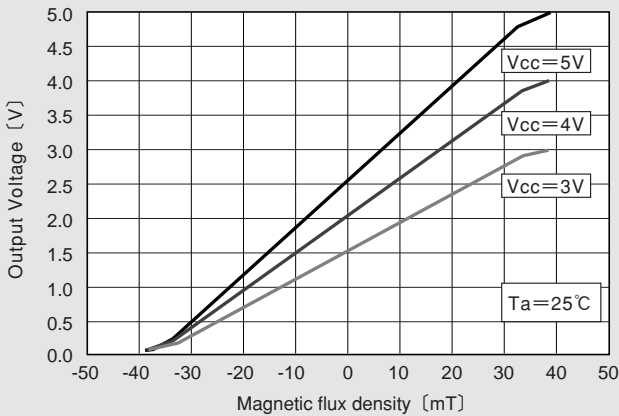


※The sensor senter is located within the  $\phi 0.3\text{mm}$  circle.

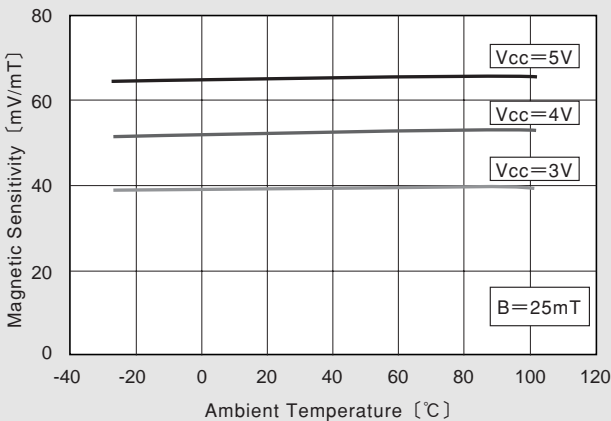
●Supply Voltage



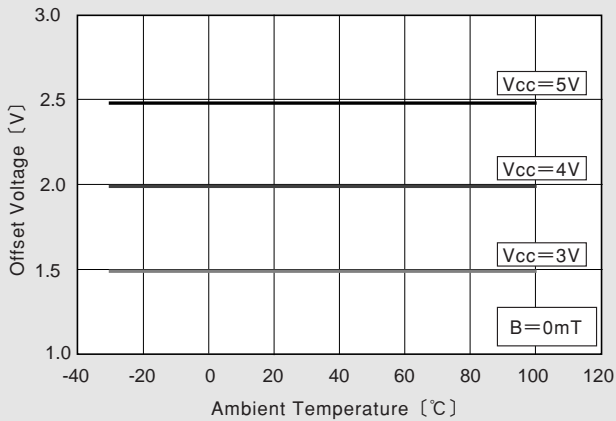
●Operational Characteristics



●Temperature dependence of  $V_H$



●(For reference only) Temperature dependence of  $V_{out0}$



S

m

p

## IMPORTANT NOTICE

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