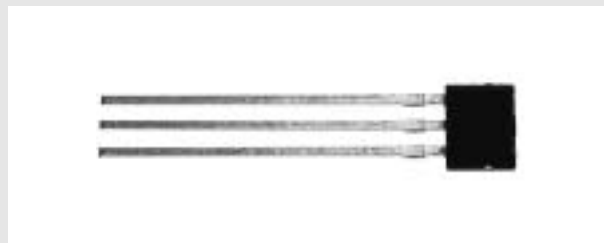
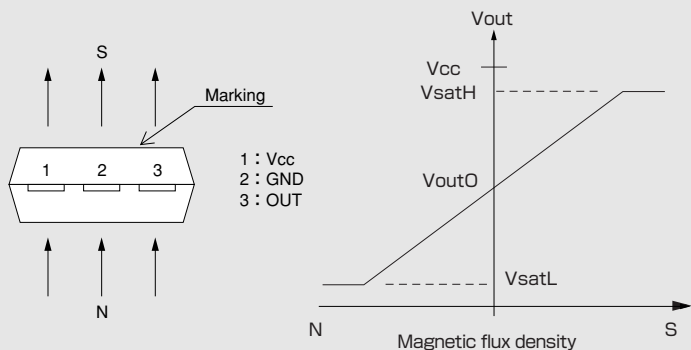


# EQ-711L

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

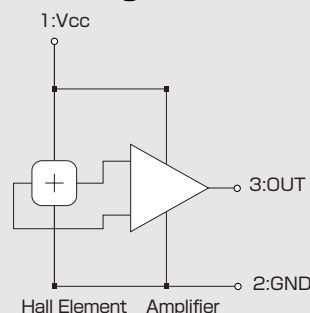


## ●Absolute Maximum Ratings (Ta=25°C)

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

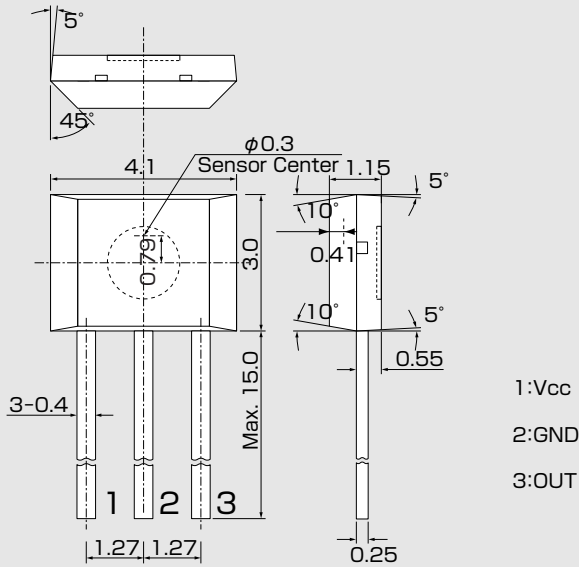
(\*\*) : for reference only

1 [mT]=10 [Gauss]

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 Certain applications using semiconductor devices may involve potential risks of personal injury, property damage, or loss of life. In order to minimize these risks, adequate design and operating safeguards should be provided by the customer to minimize inherent or procedural hazards. Inclusion of our products in such applications is understood to be fully at the risk of the customer using our devices or systems.

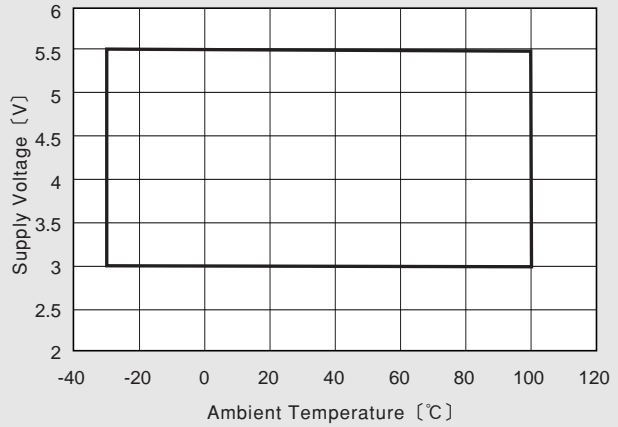
•This product contains gallium arsenide(GaAs).Handling and discarding precautions required.

●Package (Unit:mm)



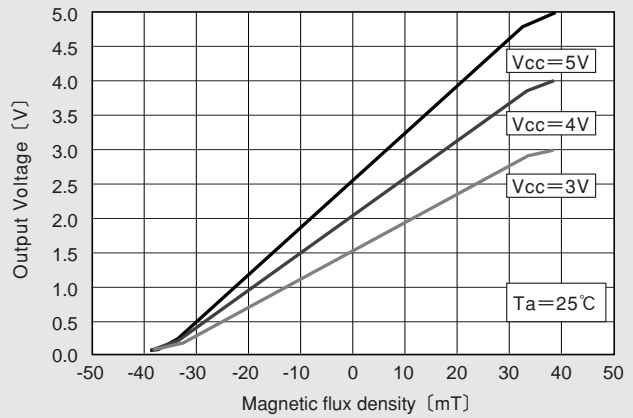
Note1) The sensor center is located within the  $\phi 0.3$ mm circle.  
 Note2) The metal portions on the package side (support lead) are connected to the internal circuits. The support lead should be isolate from the external circuit and the other support lead.

●Supply Voltage

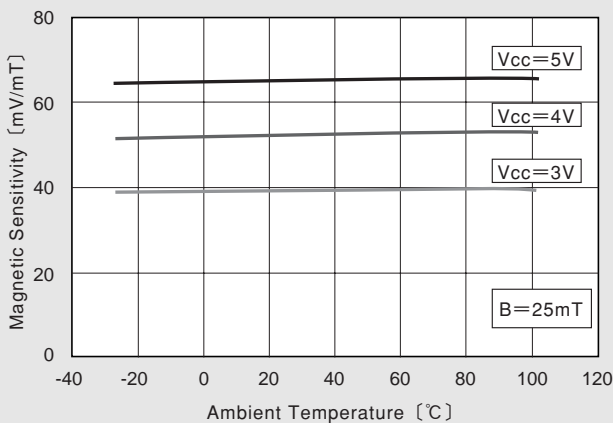


1:Vcc  
 2:GND  
 3:OUT

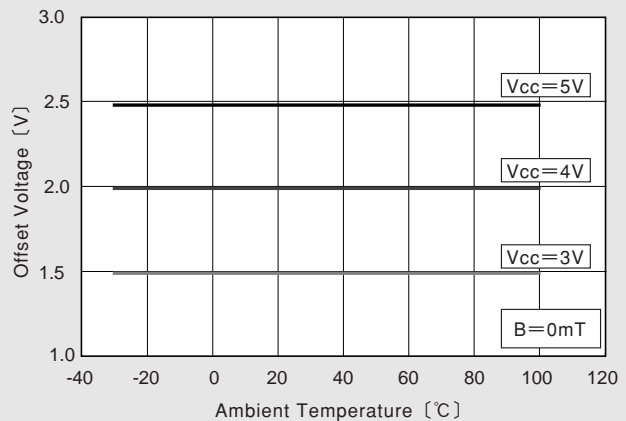
●Operational Characteristics



●Temperature dependence of VH



●(For reference only) Temperature dependence of Vout0



## IMPORTANT NOTICE

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March 14, 2012