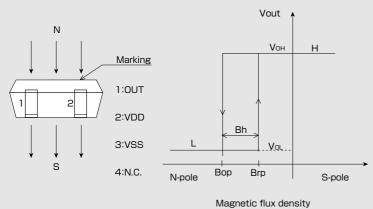
## EM-1661

Shipped in packet-tape reel(5000pcs/Reel)

EM-1661 is ultra-small Hall effect ICs of a single silicon chip composed of Hall element and a signal processing IC.

	op:3mT Output CMOS SMT
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### Operational Characteristics



●Absolute Maximum Ratings (Ta=25℃)

Item	Symbol	Limit	Unit
Supply Voltage	VDD	-0.1 ~ 5.0	V
Output Current	Iout	±1	mA
Operating Temperature Range	Topr	$-30 \sim 85$	°C
Storage Temperature Range	Tstg	-40 ~ 125	Ĵ

### ●Magnetic ① and Electrical Characteristics (Ta=25℃ VDD=3V)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	VDD		2.4	3.0	3.3	V
Operating Point	Вор		-4.0	-3.0	-2.0*	mT
Release Point	B <sub>rp</sub>		-3.2*	-2.2	-1.2	mT
Hysteresis	Bh		0.3*	0.8	1.5*	mT
Period	Тp			50	70	ms
Output High Voltage	Vон	lo=-1.0mA	VDD -0.4			V
Output Low Voltage	Vol	lo=+1.0mA			0.4	V
Supply Current	IDD	Average		5	7	μΑ
1 [mT]-10[Gauss]						

The characteristics with  $\lceil * \rfloor$  marks are design targets.

1 [mT]=10 [Gauss]

Functional Block Diagram

2:VDD

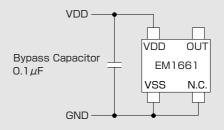
# Pulse Hall Chopper Amplifier Schmitt Output Regulator Element Stabilizer

### ●Magnetic Characteristics ② (Ta=-30℃~85℃ VDD=3V)

Item	Symbol	Conditions	Min.	Тур.	Max.	Unit
Operating Point	В <sub>ор</sub>		-4.2	-3.0	-1.8	mT
Release Point	B <sub>rp</sub>		-3.4	-2.2	-1.0	mT
Hysteresis	B <sub>h</sub>		0.3	0.8	1.5	mT

Note) The above specifications are design targets.

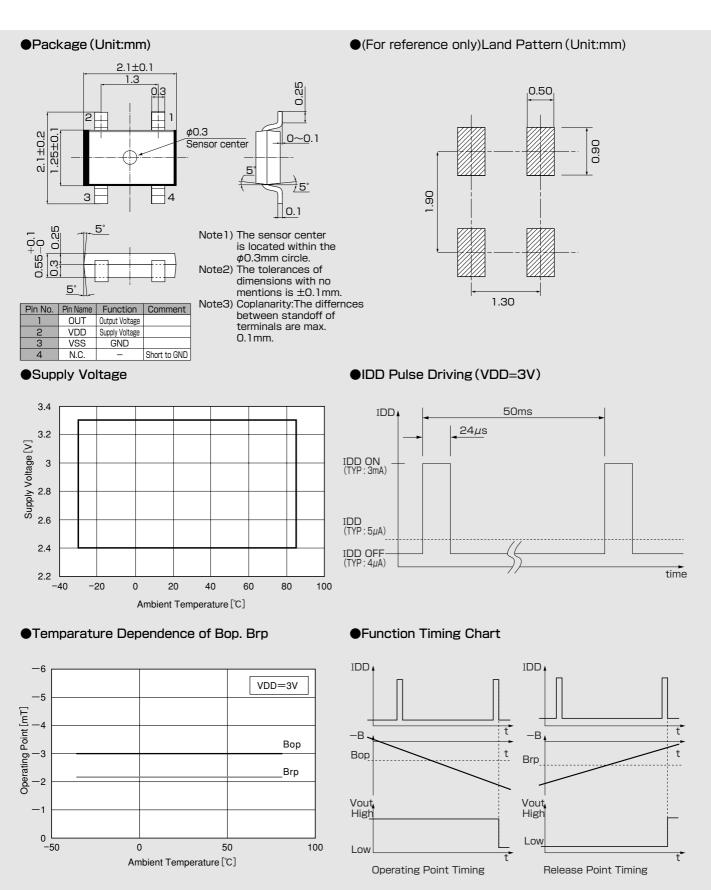
### Application Circuit



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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.



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