

AsahiKASEI Hall Effect Switch

EW-6 series

EW-6771

<http://www.asahi-kasei.co.jp/ake>

HALL IC EW-6771

Features

Ultra-sensitive Hall effect switch.....Non contact magnetic switch

Suitable for battery operation.....Vdd 1.75 to 1.95V

Low power consumption.....Average 5 μ A (Vdd=1.85V)

High sensitive.....Operate with typical 3.0mT

Wide operating temperature -30 to +85 degree C

Stable characteristics at wide temperature range

CMOS output

Notice: It is requested to read and accept "IMPORTANT NOTICE" written in the page "IMPORTANT" on the top page of this web site

Absolute Maximum Ratings (Ta=25)

Parameter	Symbol	Limit	Unit
Supply Voltage	Vdd	- 0.1 ~ 5	V
Output Current	Iout	$\pm$ 0.5	mA
Operating Temperature Range	Topr	- 30 ~ 85	
Storage Temperature Range	Tstg	- 40 ~ 125	

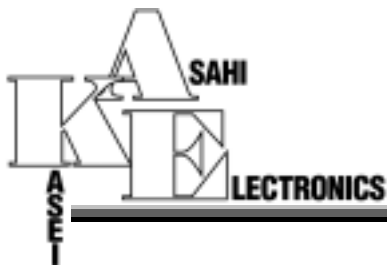
Magnetic Characteristics(1) and Electrical Characteristics

(Ta=25 Vdd=1.85V)

Parameter	Symbol	Unit	Test Condition	Min.	Typ.	Max.
Operating Point	Bop	mT		2.0	3.0	4.6
Release Point	Brp	mT		1.6	2.4	3.7
Hysteresis	Bh	mT		0.3	0.6	1.2
Period	TP	ms		25	50	100
Output High Voltage	VOH	V	I _o = - 0.5mA	Vdd - 0.4		
Output Low Voltage	VOL	V	I _o = +0.5mA			0.4
Supply Current	Idd	μ A	Average		5	8
Supply Voltage	Vdd	V		1.75	1.85	1.95

1mT=10Gauss

As of August 2004



AsahiKASEI Hall Effect Switch

EW-6 series

EW-6771

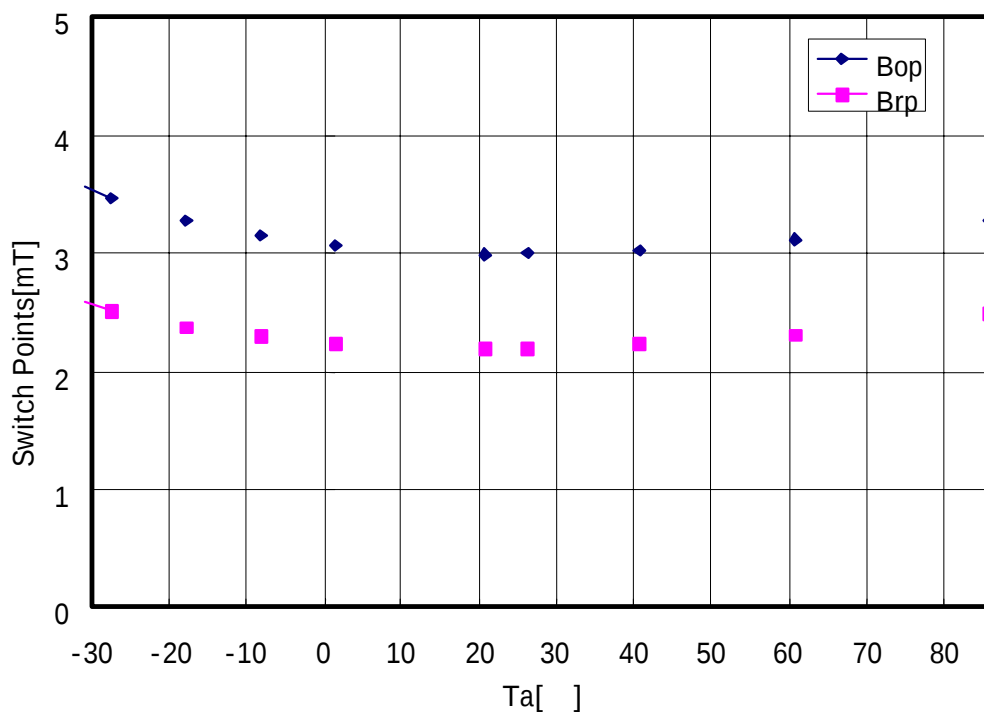
<http://www.asahi-kasei.co.jp/ake>

<Reference>

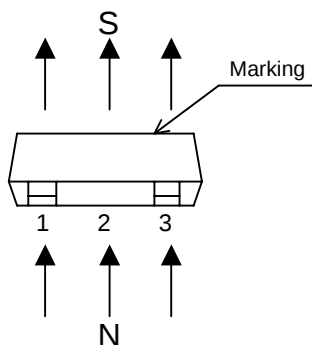
Magnetic Characteristics (2) ($T_a = -30 \sim 85$ $V_{dd} = 1.85V$)

Parameter	Symbol	Unit	Min.	Typ.	Max.
Operating Point	Bop	mT	1.9	3.0	5.7
Release Point	Brp	mT	1.6	2.4	4.6
Hysteresis	Bh	mT	0.3	0.6	1.5

Typical Temperature Dependence ($V_{dd} = 1.85V$)



Operational Characteristics

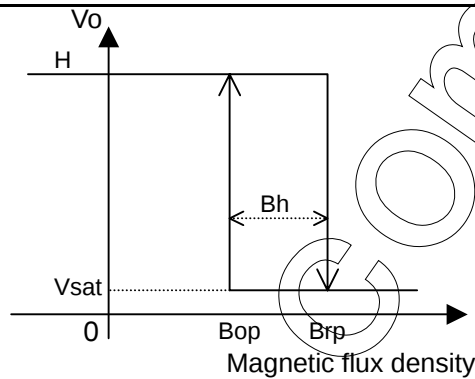


1: Vdd

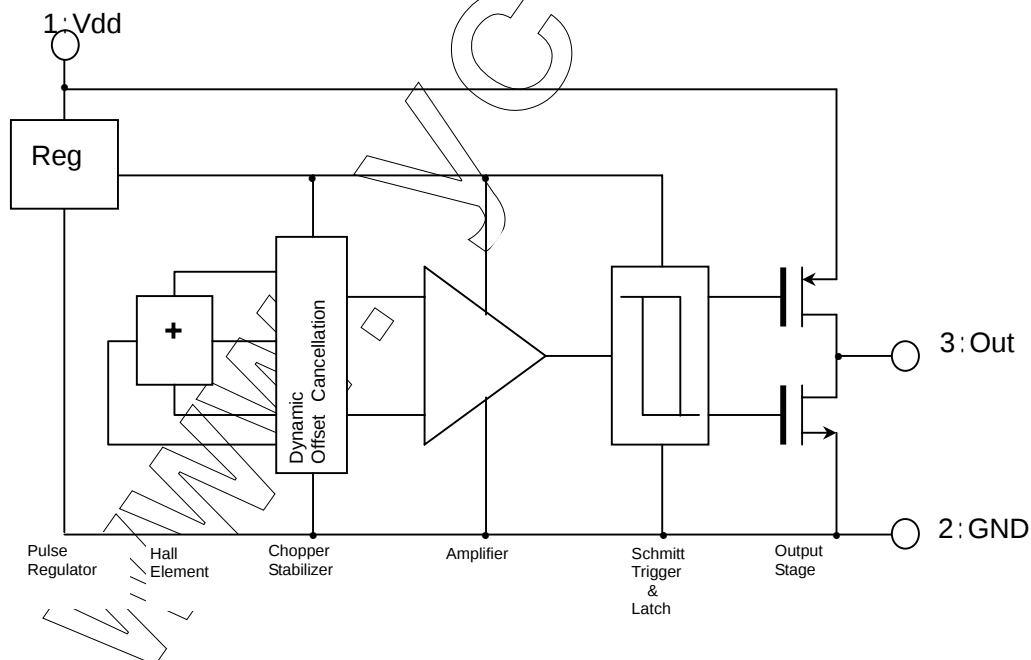
(2: Gnd)

3: Out

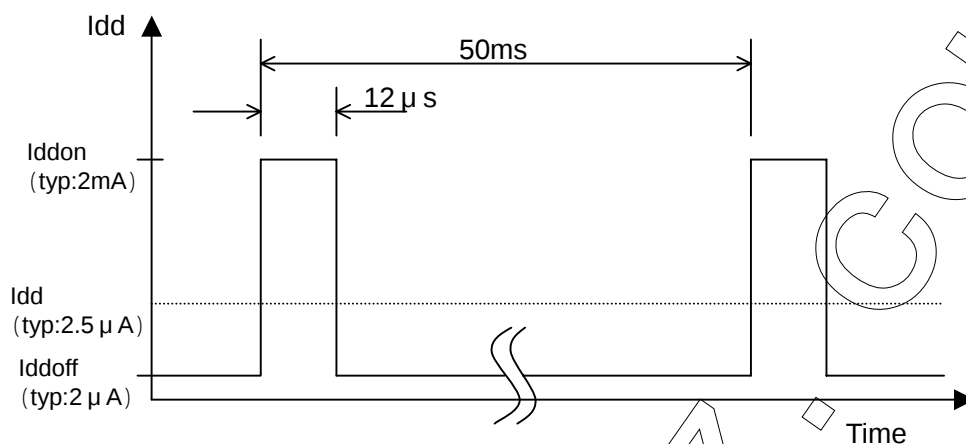
EW-6771



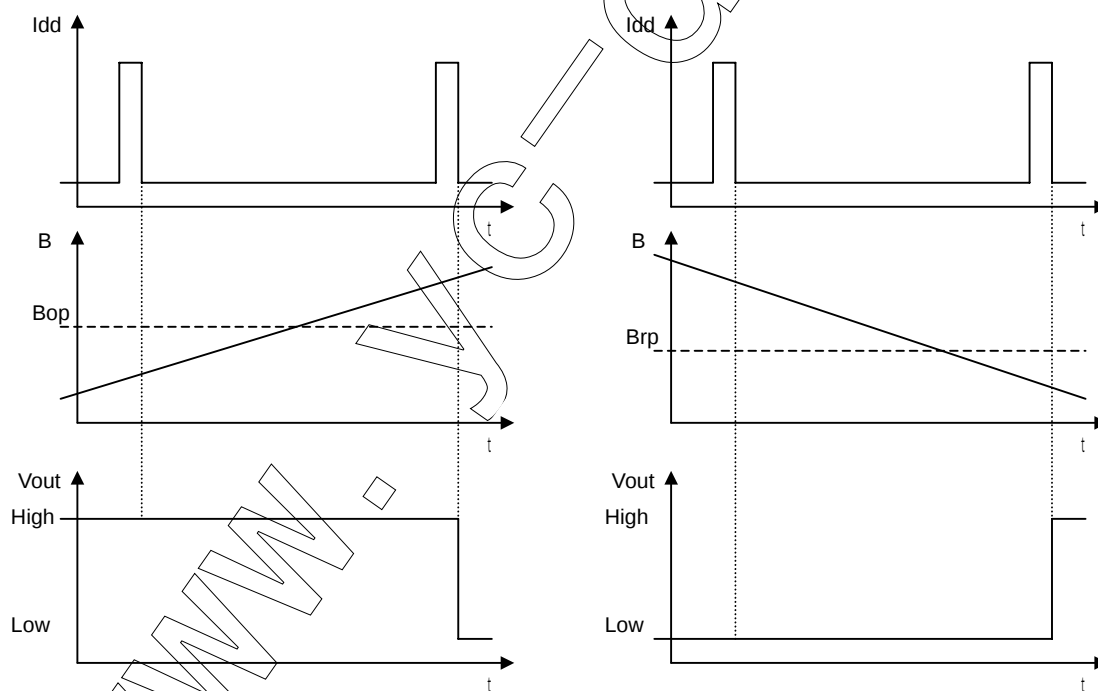
Functional Block Diagram



Id d Pulse Driving



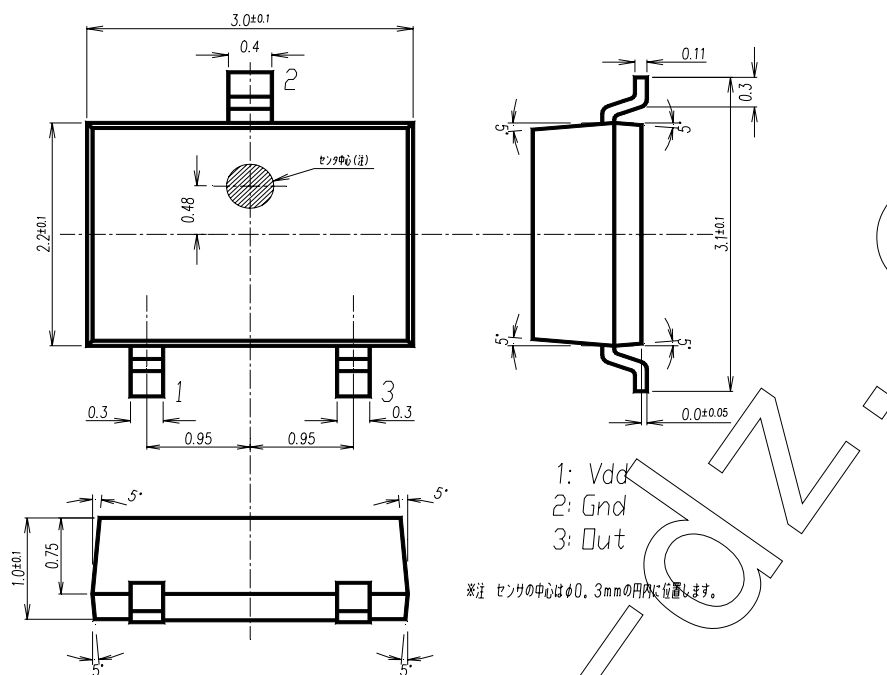
Function Timing Chart



Operate Point Timing

Release Point Timing

Dimensions (mm)



Asahi Kasei Electronics reserves the right to revise this specification.