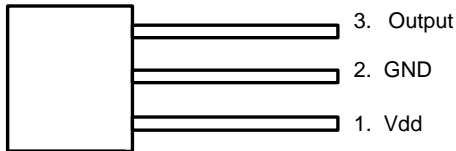


Pin Assignments

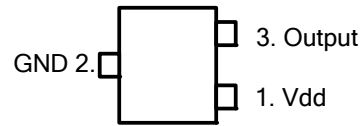
(1) SIP-3L

(Top view)



(2) SC59

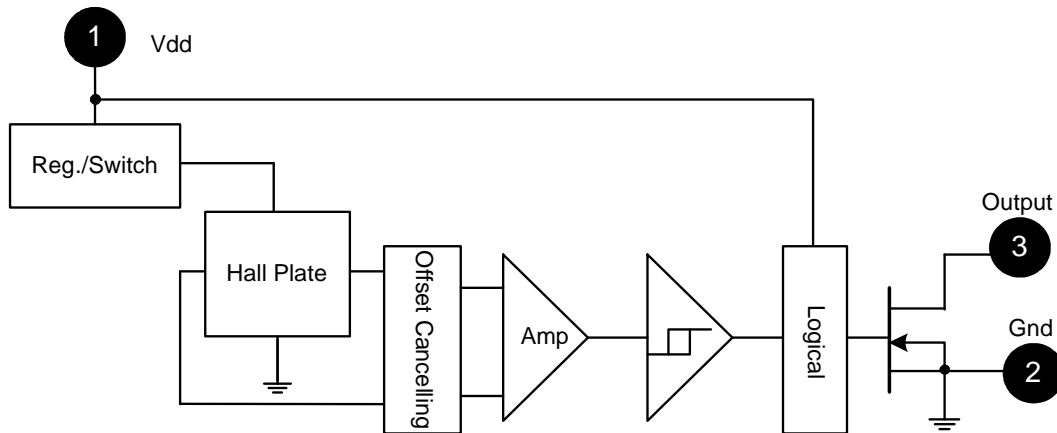
(Top view)



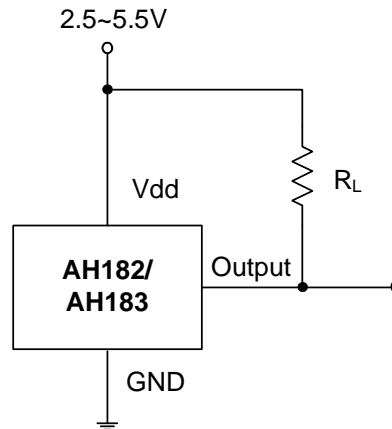
Pin Description

Name	P/I/O	Pin #	Description
Vdd	P/I	1	Power Supply Input
GND	P	2	Ground
Output	O	3	Output Pin

Block Diagram



Typical Circuit



Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$)

Symbol	Parameter	Rating	Unit
Vdd	Supply Voltage	7	V
B	Magnetic Flux Density	Unlimited	
I _{OUT}	Output current	10	
P _D	Power Dissipation	SIP-3L	550 mW
		SC59	230 mW
T _{J(MAX)}	Maximum Junction Temperature	150	°C
T _{ST}	Storage Temperature Range	-65 to +150	°C

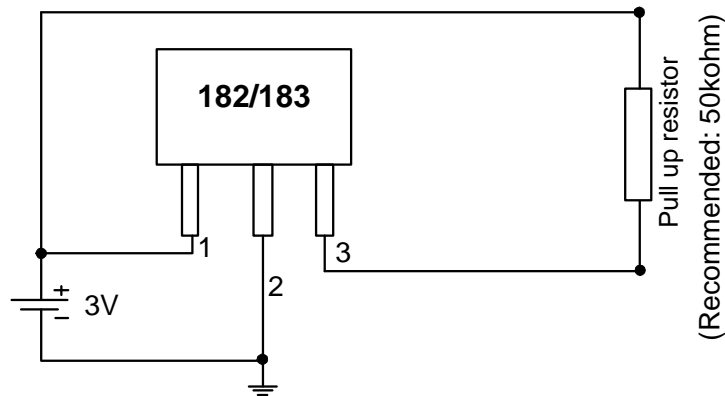
Recommended Operating Conditions ($T_A = 25^\circ\text{C}$)

Symbol	Parameter	Conditions	Min	Max	Unit
Vdd	Supply Voltage	Operating	2.5	5.5	V
T _A	Operating Ambient Temperature	Operating	-40	85	°C

Electrical Characteristics ($T_A = 25^\circ\text{C}$, $V_{DD} = 3\text{V}$)

Symbol	Characteristic	Conditions	Min	Typ.	Max	Unit
V_{OUT}	Output On Voltage	$I_{OUT} = 1\text{mA}$	-	0.1	0.3	V
I_{off}	Output Leakage Current	$V_{OUT} = 5.5\text{V}$, $B < Brp$	-	<0.1	1	μA
$I_{dd(en)}$	Supply Current	Chip enable	-	-	2.0	mA
$I_{dd(dis)}$		Chip disable	-	-	8.0	μA
$I_{dd(ave)}$		AH182: average supply current	-	5	10	μA
$I_{dd(ave)}$		AH183: average supply current	-	280	500	μA
T_{awake}	Awake Time		-	50	100	μs
T_{period}	Period	AH182	-	50	100	ms
		AH183	-	200	400	μs
D.C.	Duty Cycle	AH182	-	0.1	-	%
		AH183	-	25	-	%

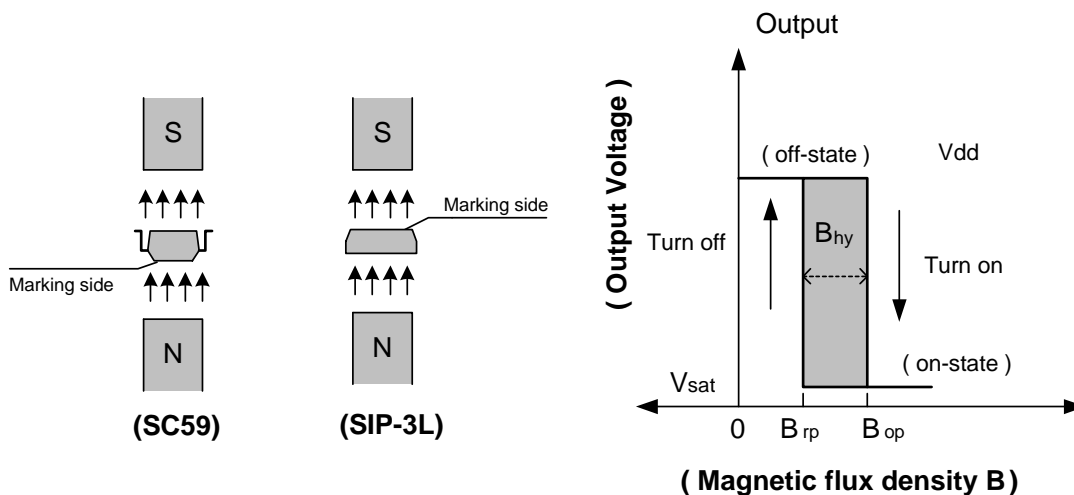
Test Circuit



Magnetic Characteristics ($T_A = 25^\circ\text{C}$, $V_{dd} = 3\text{V}$)

(1mT = 10 Gauss)

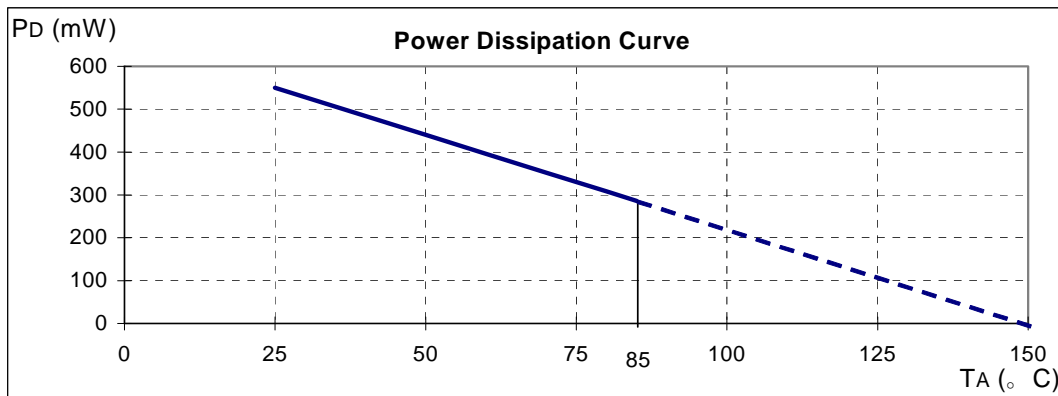
Symbol	Characteristic	Min	Typ.	Max	Unit
Bops(south pole to brand side)	Operation Point	-	40	60	Gauss
Brps(south pole to brand side)	Release Point	10	30	-	
Bhy($ B_{opx} - B_{rpx} $)	Hysteresis	-	10	-	



Performance Characteristics

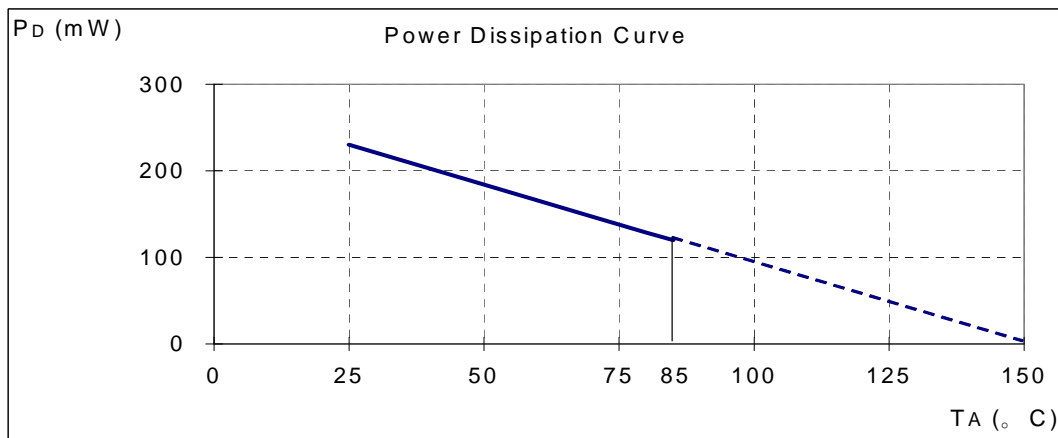
(1) SIP-3L

TA (°C)	25	50	60	70	80	85	90	95	100
PD (mW)	550	440	396	352	308	286	264	242	220
TA (°C)	105	110	115	120	125	130	135	140	150
PD (mW)	198	176	154	132	110	88	66	44	0



(2) SC59 (Commonly known as SOT23 in Asia)

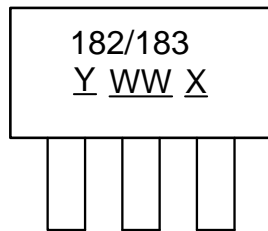
TA (°C)	25	50	60	70	80	85	90	100	110	120	130	140	150
PD (mW)	230	184	166	147	129	120	110	92	74	55	37	18	0



Marking Information

(1) SIP-3L

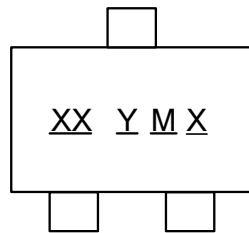
(Top View)



Y : Year : "7" = 2007
"8" = 2008
WW : Nth Week 01~52
X : Internal code
a~z : Lead Free

(2) SC59 (Commonly known as SOT23 in Asia)

(Top View)

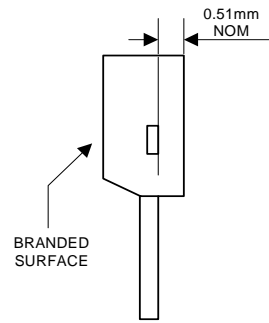


XX : K2 : AH182
K3 : AH183
Y : Year 0~9
M : Month A~L
X : Internal code
A~Z : Green
a~z : Lead Free

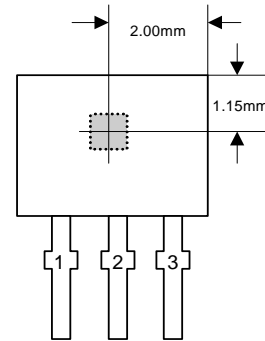
Part Number	Package	Identification Code
AH182	SC59	K2
AH183	SC59	K3

Package Information (All Dimensions in mm)

(1) Package Type: SIP-3L for Bulk only

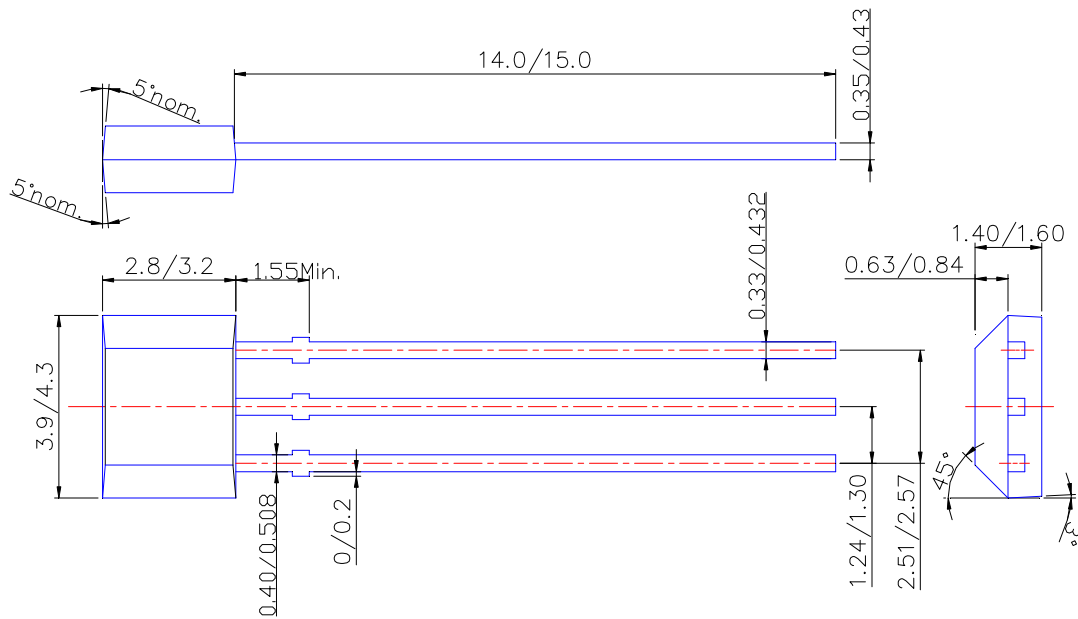


Active Area Depth



Sensor Location

Package Dimension



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