A1282 Specification

Sensitive Unipolar Hall Effect Switch

A1282 is a general sensitivity of unipolar Hall switch.

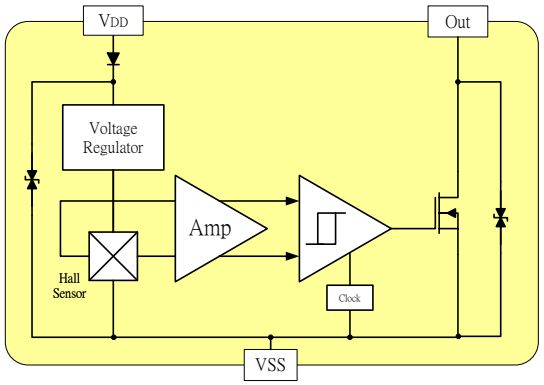
DMOS Hall Effect Switch	Supply Voltage 3.0 ~ 24V	Bop：85 Gauss Brp：65 Gauss	Output Open Drain	Package SIP-3(I3) SOT-23(S3)

◆ Absolute Maximum Ratings

At (Ta=25℃)

Characteristics	Values	Unit
Supply voltage (V_{DD})	28	V
Output Voltage,(*Vout*)	28	V
Output current, (I_{SINK})	50	mA
Operating Temperature Range, (T_A)	-40 ~ +125	℃
Storage temperature Range, (*Ts*)	-55 ~ +150	℃
Package Power Dissipation, (P_D)	606 / 230	mW

◆ Functional Block Diagram



◆ Electrical Specifications

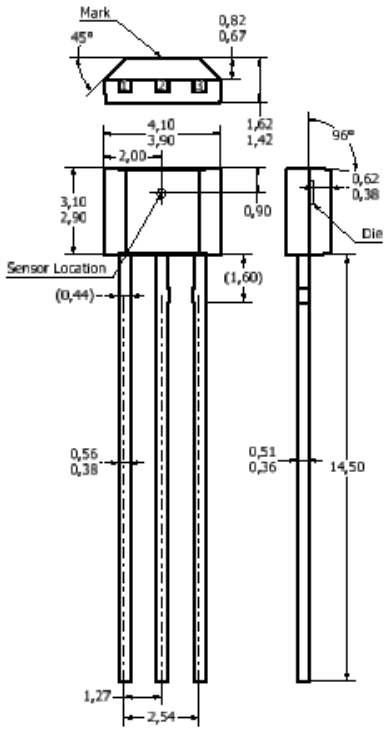
DC Operating Parameters ： T_A=+25℃, V_{DD}=12V

Parameters	Test Conditions	Min	Typ	Max	Units
Supply Voltage,(V_{DD})	Operating	3.0		24.0	V
Supply Current,(I_{DD})	B<Bop		2.5	5.0	mA
Output Saturation Voltage, (V_{DSON})	Iout=20mA,B>Bop			500.0	mV
Output Leakage Current, (*Ioff*)	Ioff B<Brp, Vout = 20V			10.0	uA
Output Rise Time, (T_R)	RL=1kΩ, CL =20pF		0.04	0.45	uS
Output Fall Time, (T_F)	RL=1kΩ; CL =20pF		0.18	0.45	uS
Electro-Static Discharge	HBM	4			KV
Operate Point,(B_{OP})	I3(S3)	60(-100)		100(-60)	Gauss
Release Point,(B_{RP})	I3(S3)	40(-80)		80(-40)	Gauss
Hysteresis,(B_{HYS})	|Bop - Brp|		20		Gauss

◆ Package Dimension and Sensor Location

I3 Package

(Top VieW)



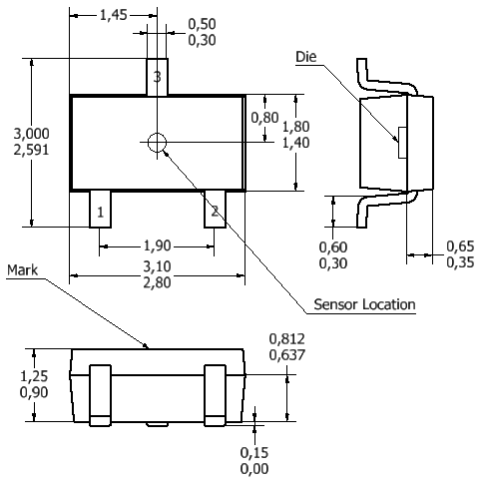
NOTES:

1. Controlling dimension: mm
2. Leads must be free of flash and plating voids
3. Do not bend leads within 1 mm of lead to package interface.
4. PINOUT:

Pin No.	Pin Name	Function
1	V_{DD}	Power Supply
2	V_{SS}	Ground
3	V_{OUT}	Output

S3 Package

(Top VieW)



NOTES:

1. Controlling dimension: mm
2. Leads must be free of flash and plating voids
3. Lead thickness after solder plating will be 0.254mm maximum
4. PINOUT:

Pin No.	Pin Name	Function
1	V_{DD}	Power Supply
2	V_{OUT}	Output
3	V_{SS}	Ground