

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

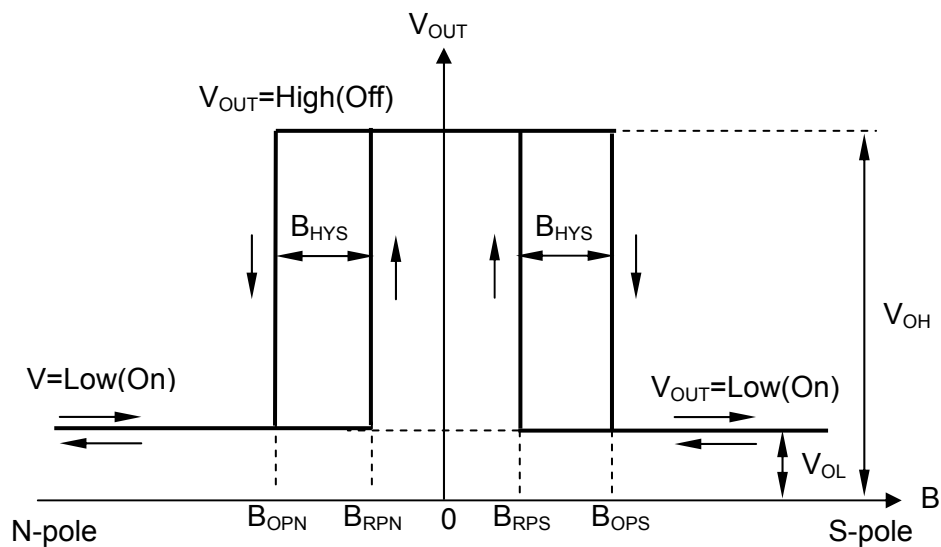
Parameter	Symbol	Value		Unit
		Min	Max	
Supply Voltage	V_{DD}	-0.3	7	V
Output Voltage	V_{OUT}	-0.3	7	V
Output Current	I_{OUT}	-	1	mA
Operating Temperature Range (E)	T_A	-40	85	$^\circ\text{C}$
Storage Temperature Range	T_S	-65	150	$^\circ\text{C}$
Maximum Junction Temperature	T_J	-	150	$^\circ\text{C}$
Power Dissipation (UA/ST/SN)	P_D	-	606/400/230	mW

Electrical Characteristics ($T_A=25^\circ\text{C}$, $V_{DD}=1.8\text{V}$)

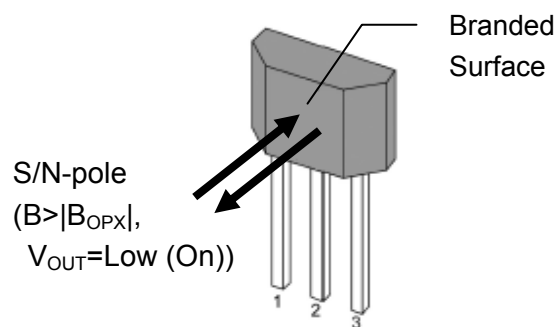
Parameter	Test Condition	Symbol	Value			Unit
			Min	Typ	Max	
Supply Voltage		V_{DD}	1.7	-	5.5	V
Consumption Current	Awake Mode	I_{DD}	-	1.4	3	mA
	Sleep Mode	I_{DD}		3.6	7	μA
	Average	I_{DD}	-	5	10	μA
Output High Voltage	$I_{OUT}=-0.5\text{mA}$ (Sink)	V_{OH}	V_{DD} -0.2	-	-	V
Output Low Voltage	$I_{OUT}=0.5\text{mA}$ (Source)	V_{OL}	-	-	0.2	V
Awake Mode Time		t_{AW}	-	40	80	μs
Sleep Mode Time		t_{SL}	-	40	80	ms
Electro-Static Discharge	HBM		4	-	-	kV

Magnetic Characteristics ($T_A=25^\circ\text{C}$, $V_{DD}=1.8\text{V}$)

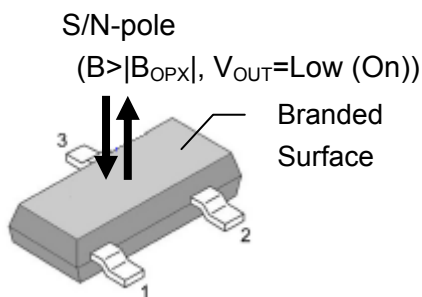
Parameter	Test Condition	Symbol	Value			Unit
			Min	Typ	Max	
Operate Point	S pole to branded side	B_{OPS}	2	3	4	mT
	N pole to branded side	B_{OPN}	-4	-3	-2	mT
Release Point	S pole to branded side	B_{RPS}	1	2	3	mT
	N pole to branded side	B_{RPN}	-3	-2	-1	mT
Hysteresis	$ B_{OPX} - B_{RPX} $	B_{HYS}	-	1	-	mT



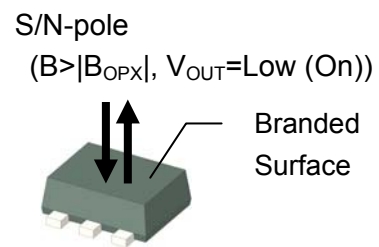
Switching Characteristics



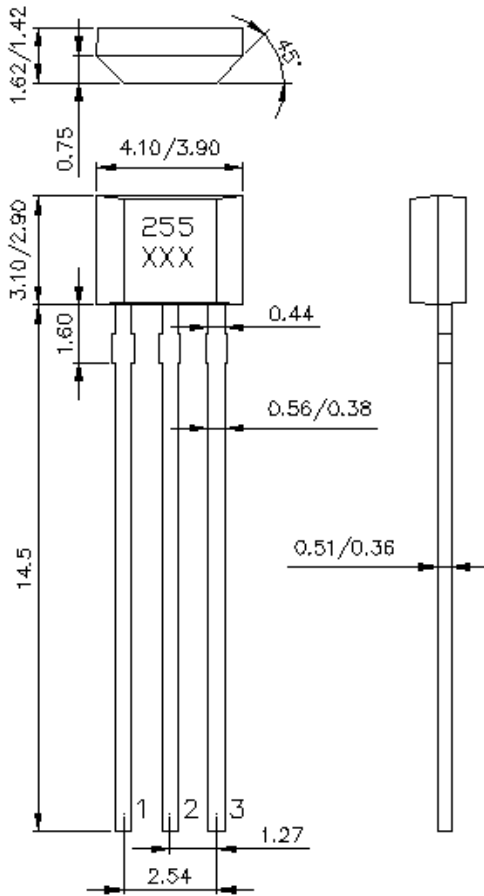
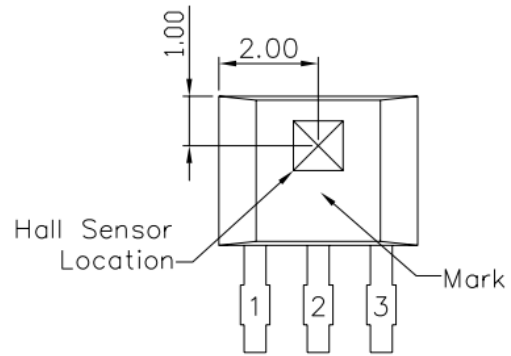
UA-package



ST-package

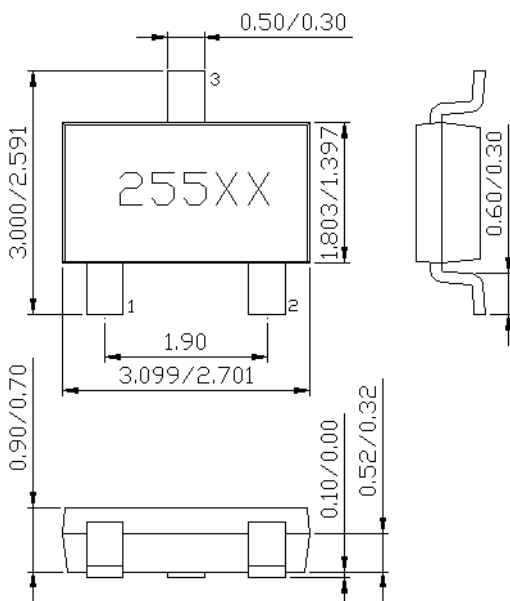
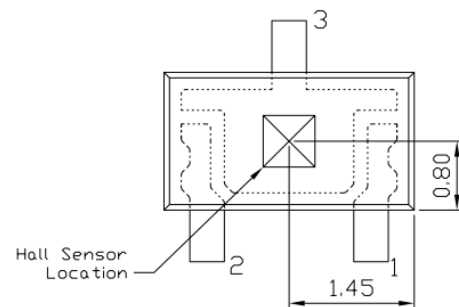


SN-package

Sensor Location, Package Dimension and Marking
UA-package: TO92S

Hall sensor location

NOTES:

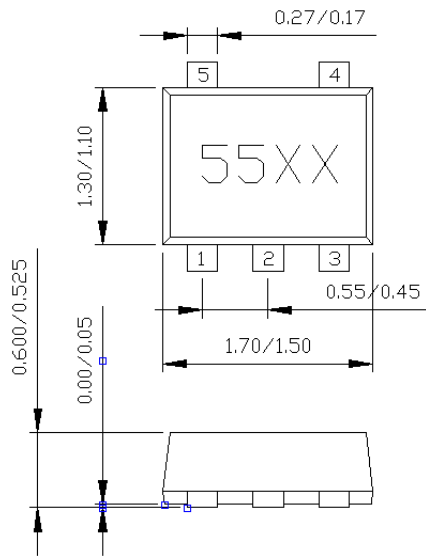
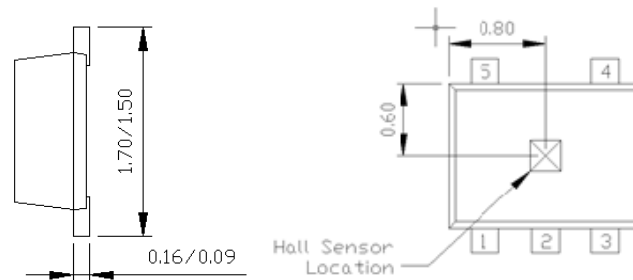
1. Controlling dimension: mm
2. Leads must be free of flash plating voids
3. Don't bend leads within 1 mm of leads to package interface
4. PINOUT:

Pin 1	VDD
Pin 2	GND
Pin 3	Output

**ST-package: TSOT23
(Top View)**

**Hall sensor location
(Bottom view)**

NOTES:

1. PINOUT:

Pin 1	V _{DD}
Pin 2	Output
Pin 3	GND
2. Controlling dimension: mm

**SN-package: SOT553
(Top View)**

**Hall sensor location
(Top View)**

NOTES:
1. PINOUT:

Pin 1	NC
Pin 2	GND
Pin 3	NC
Pin 4	VDD
Pin 5	Output

2. Controlling dimension: mm