



SK8509

LINEAR INTEGRATED CIRCUIT

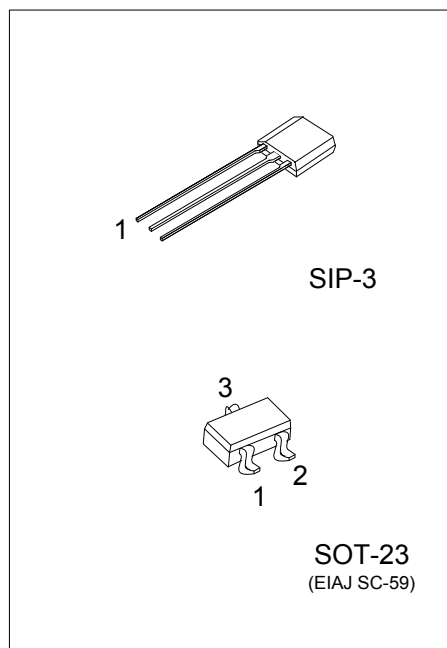
HALL-EFFECT SENSOR IC

DESCRIPTION

SK8509 is a semiconductor integrated circuit utilizing the Hall effect. It has been so designed as to operate in the accurately track extremely small changes in magnetic flux density-changes generally too small to operate Hall-effect switches. This Hall IC is suitable for application to various kinds of sensors, contact-less switches, motion detectors, gear tooth sensors, and proximity detectors, and the like.

FEATURES

- * Wide Supply Voltage Range of 4V to 7V
- * Wide Temperature Operation Range of -20°C ~+85°C
- * The Life is Semipermanent because it Employs Contactless Parts



ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
SK8509L-AE3-R	SK8509G-AE3-R	SOT-23	I	O	G	Tape Reel
SK8509L-G03-B	SK8509G-G03-B	SIP-3	I	G	O	Tape Box
SK8509L-G03-K	SK8509G-G03-K	SIP-3	I	G	O	Bulk

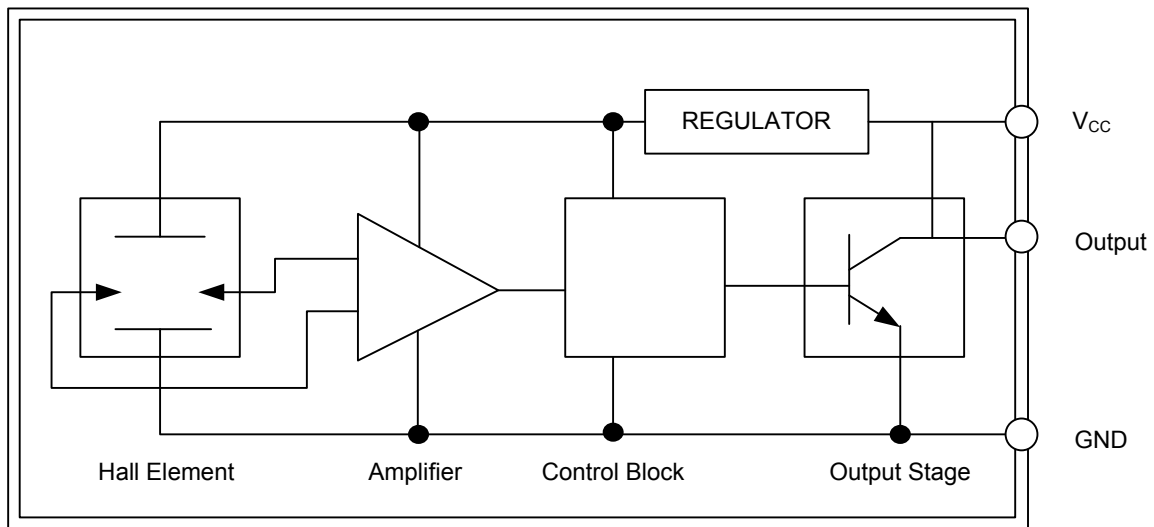
Note: Pin Assignment: I: V_{CC} O: V_{OUT} G: GND

<p>SK8509G-AE3-R</p> <p>(1)Packing Type (2)Package Type (3)Green Package</p>	<p>(1) B: Tape Box, K: Bulk, R: Tape Reel (2) AE3: SOT-23, G03: SIP-3 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING

SIP-3	SOT-23
<p>8509 □ □ □ □ □ → L: Lead Free → G: Halogen Free → Date Code</p>	<p>8509 □ → L: Lead Free → G: Halogen Free</p>

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V_{CC}	7V	V
Supply Current	I_{CC}	10	mA
Operating Ambient Temperature	T_{OPR}	-20 ~ +85	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, $V_{CC}=5\text{V}$)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Operating Voltage	V_{CC}		4		7	V
Quiescent Output Voltage	V_{OUT}	B=0G	2.25	2.50	2.75	V
Supply Current	I_{CC}			3	10	mA
Sensitivity	ΔV_{OUT}	B=0G ~ $\pm 900\text{G}$	1.0	1.7	2.5	mV/G

■ PACKAGE INFORMATION

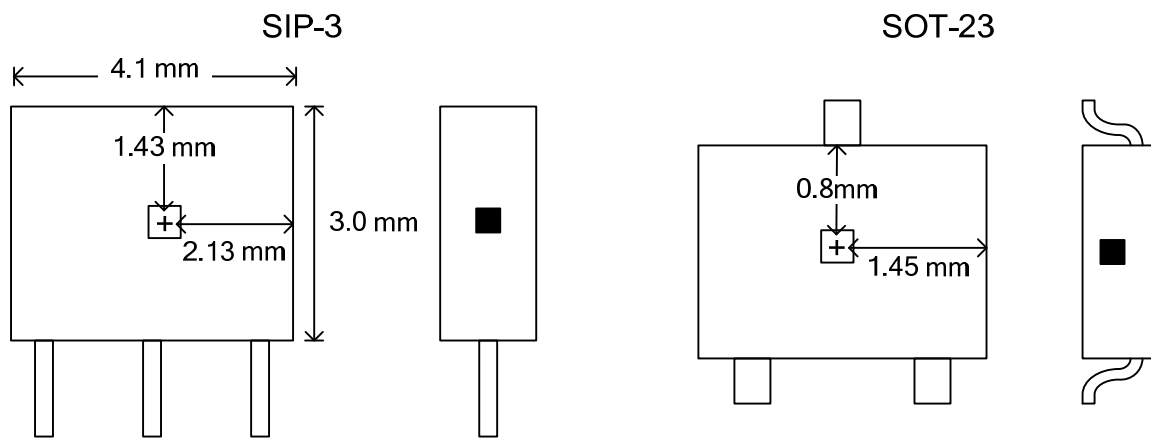
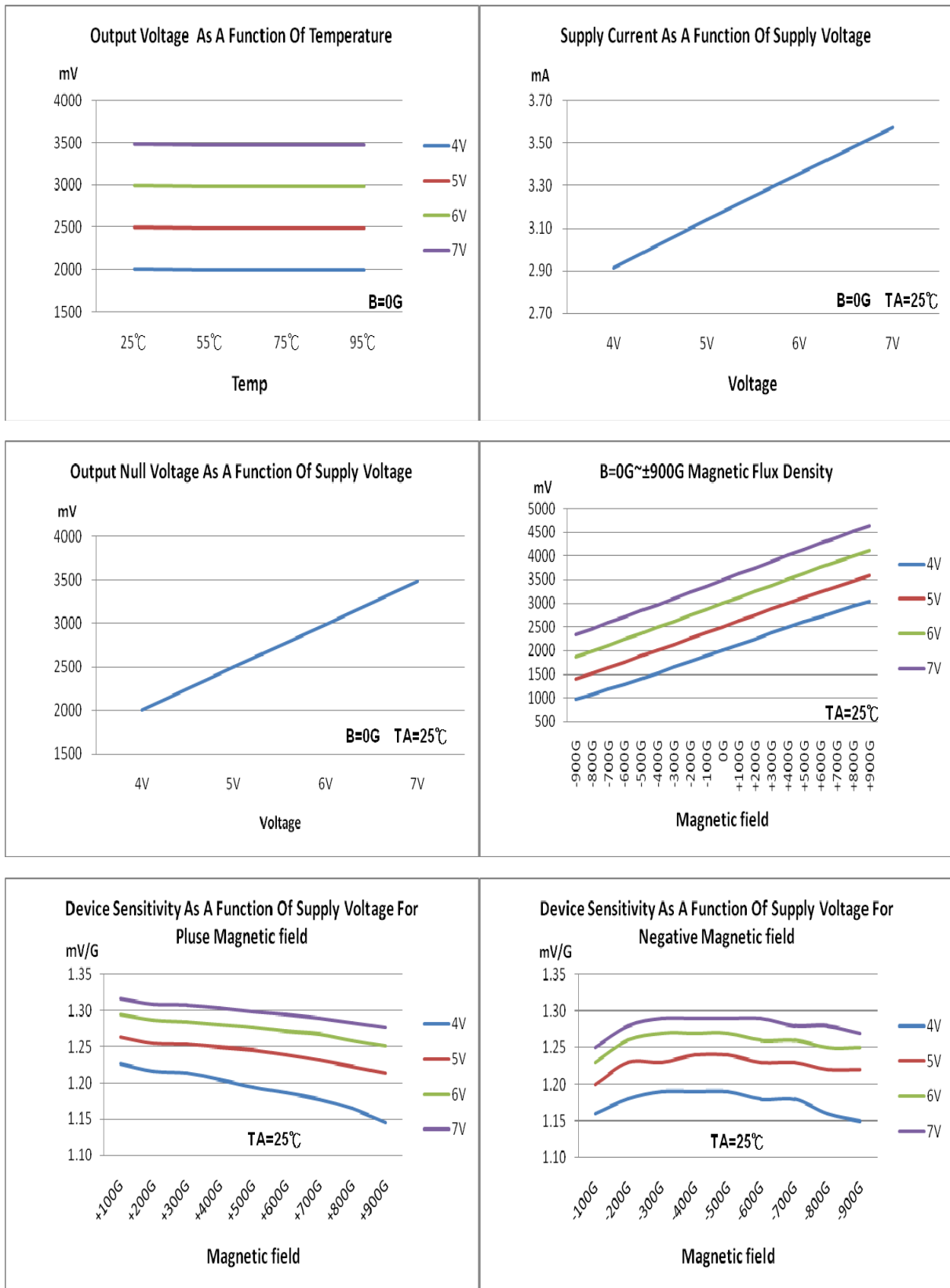


Fig. 1 SENSOR LOCATIONS

TYPICAL CHARACTERISTICS



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