



SK8509

LINEAR INTEGRATED CIRCUIT

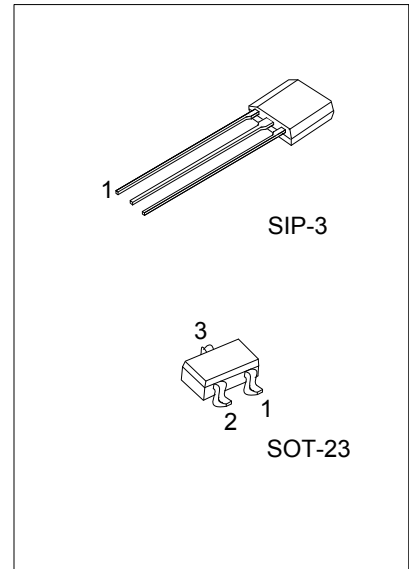
HALL-EFFECT SENSOR IC

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



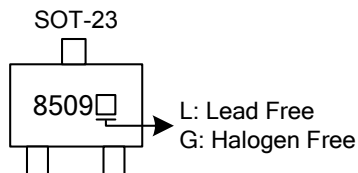
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
SK8509L-AE3-R	SK8509G-AE3-R	SOT-23	O	I	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

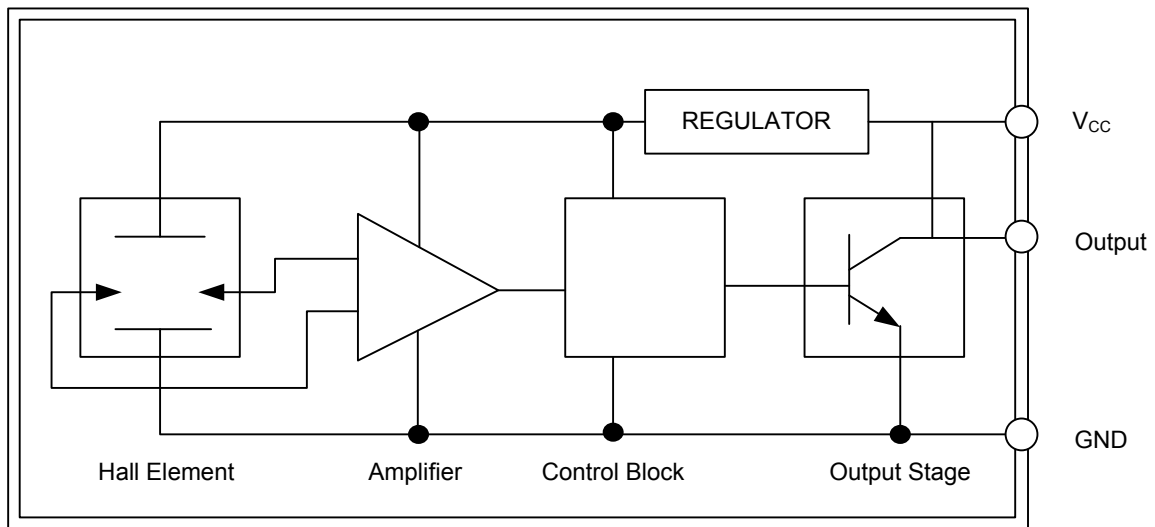
Note: Pin Assignment: I: V_{CC} O: V_{OUT} G: GND

<p>SK8509L-AE3-R</p> <p>(1) Packing Type (2) Package Type (3) Lead Free</p>	<p>(1) B: Tape Box, K: Bulk, R: Tape Reel (2) AE3: SOT-23, G03: SIP-3 (3) G: Halogen Free, L: Lead Free</p>
---	---

MARKING



■ 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 ~ ±900G	0.75	1.30	1.75	mV/G

■ PACKAGE INFORMATION

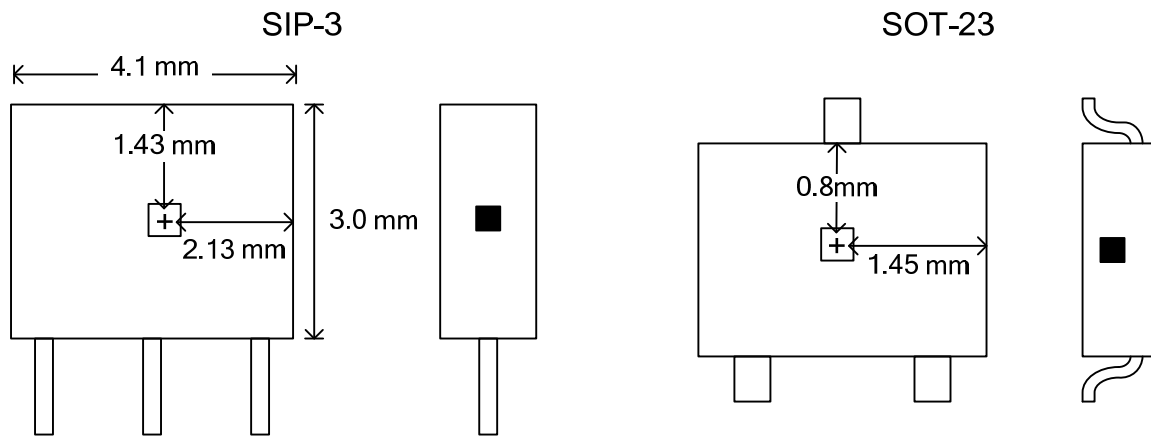
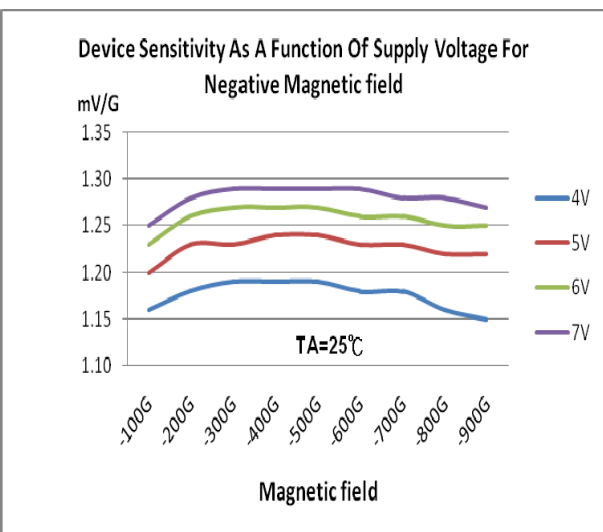
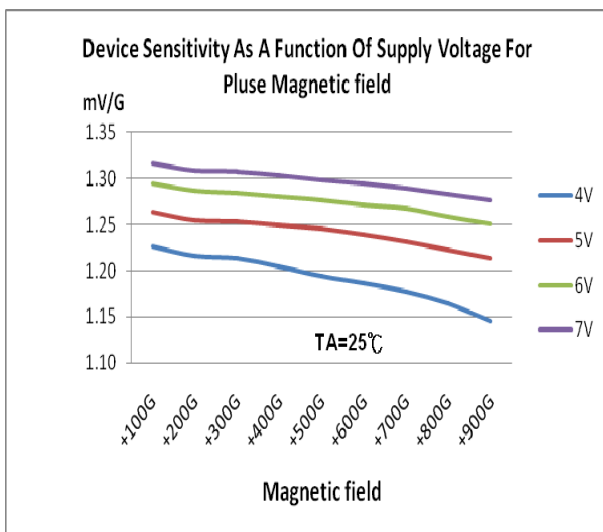
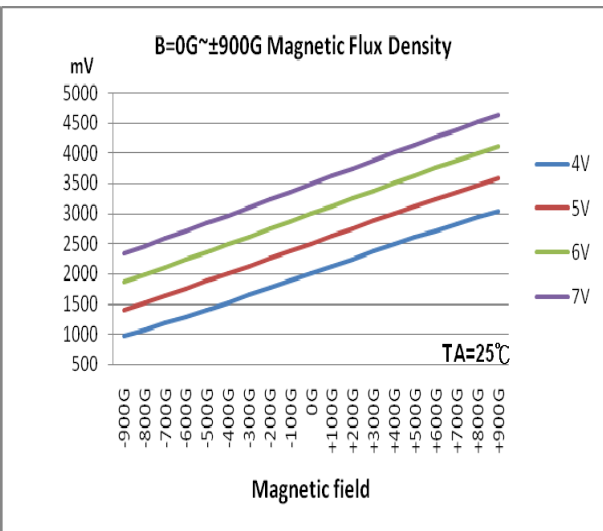
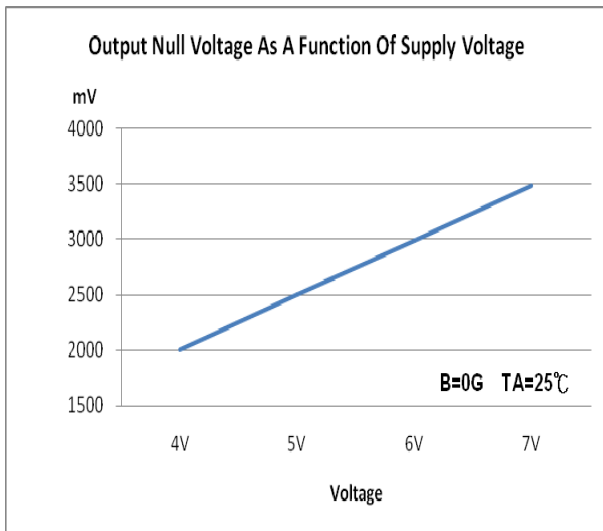
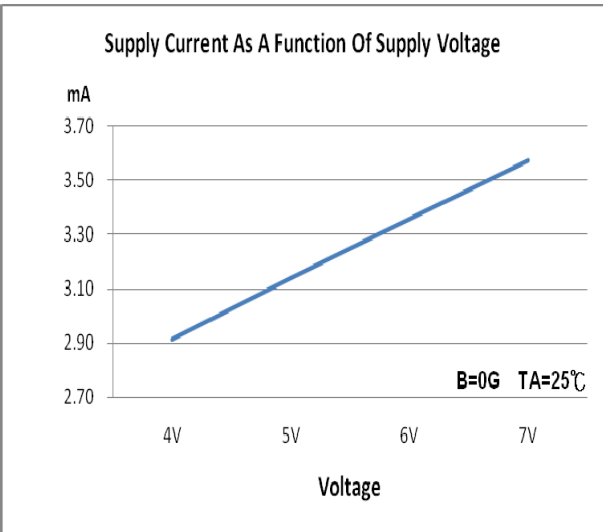
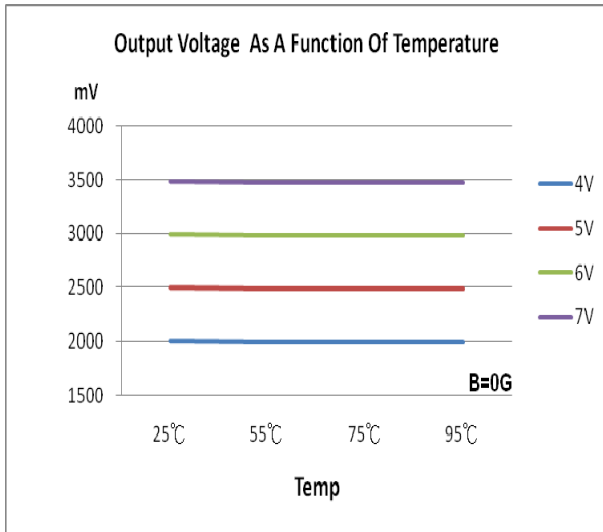


Fig. 1 SENSOR LOCATIONS

■ TYPICAL CHARACTERISTICS



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.