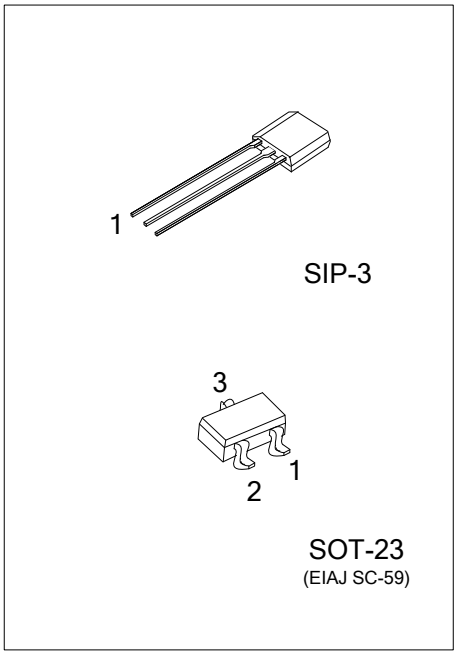
SK8509 **LINEAR INTEGRATED CIRCUIT**

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

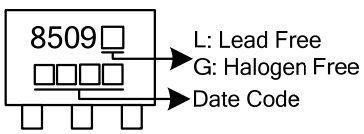
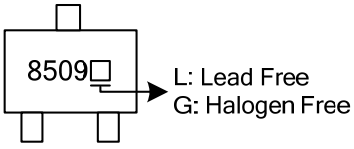
SK8509L-AE3-R

(1)Packing Type — (1) B: Tape Box, K: Bulk, R: Tape Reel

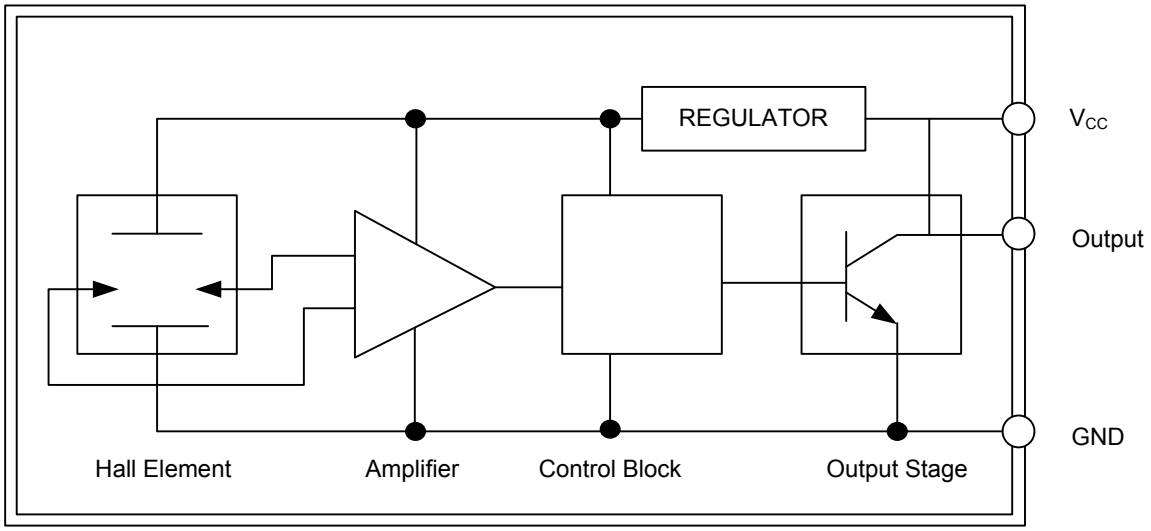
(2)Package Type — (2) AE3: SOT-23, G03: SIP-3

(3)Lead Free — (3) G: Halogen Free, L: Lead Free

■ MARKING

SIP-3	SOT-23
	

■ 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°C, V_{CC}=5V)

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

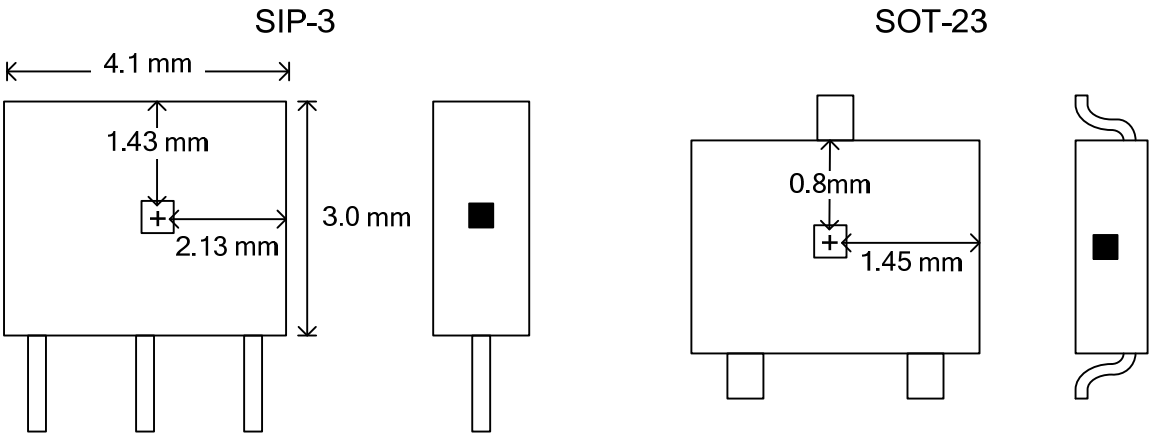


Fig. 1 SENSOR LOCATIONS

■ TYPICAL CHARACTERISTICS