MICRO SWITCH
a Honeywell Division
FED. MFG. CODE 91929

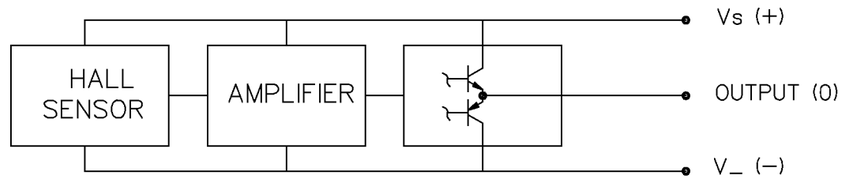
LINEAR OUTPUT HALL EFFECT TRANSDUCER

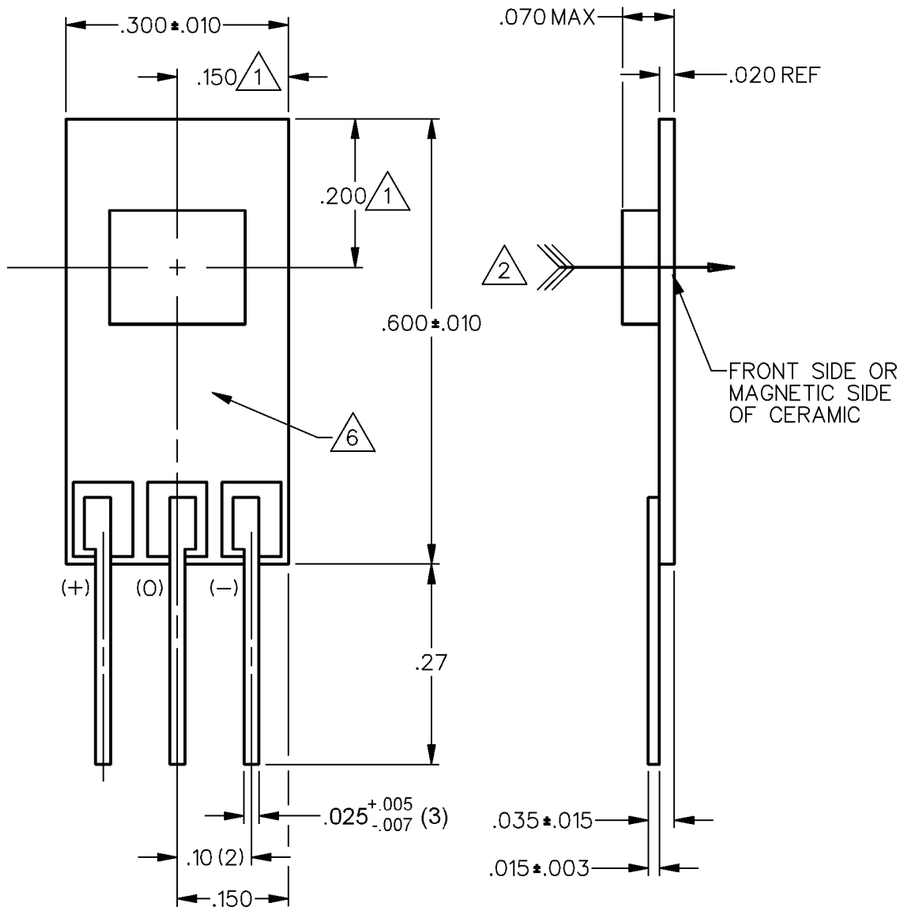
CATALOG LISTING
SS94A1E

OPERATING CHARACTERISTICS

PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS/REMARKS
SUPPLY VOLTAGE	6.6	8.0	12.6	VOLTS	−40°C TO +125°C
SUPPLY CURRENT		13	30	mA	MAX @ 12.6 V @ −40°C
OUTPUT CURRENT			1	mA	SINKING OR SOURCING
OUTPUT SPAN		.625 V_S		VOLTS	−500G TO +500G @ 25°C △5
SENSITIVITY	4.90	5.0	5.10	mV/g	@ 8.0 V_S & 25°C
LINEARITY	−1.5	−.8	0	% OF SPAN	DEV FROM STR LINE THRU −500 AND +500
V_{OUT} @ 0 GAUSS	3.960	4.000	4.040	VOLTS	25°C
TEMP ERROR−NULL	−.01		+.01	%/°C	−40°C TO +125°C
TEMP ERROR−GAIN	−.02		+.02	%/°C	−40°C TO +125°C

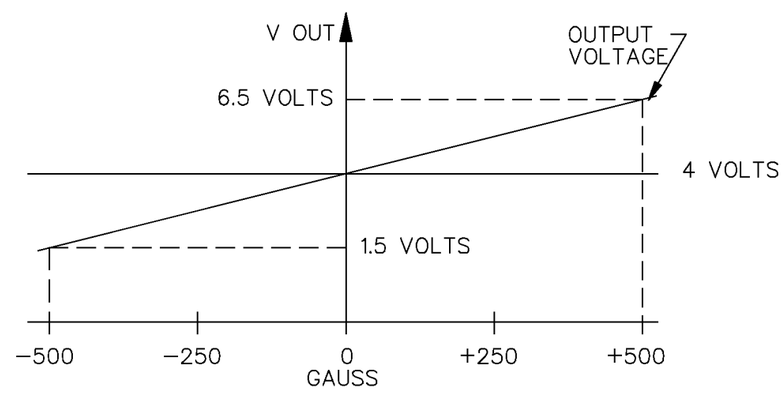
BLOCK DIAGRAM CURRENT SINKING OR SOURCING OUTPUT





NOTES
△1 CENTERLINE OF HALL CELL (IC) ONLY. THE LOCATION OF THE CERAMIC COVER IS NOT SPECIFIED
△2 THE + MAGNETIC FLUX IS IN THIS DIRECTION (THIS ASSUMES THE CONVENTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO THE SOUTH POLE OF THE MAGNET)
3 − THE DEVICE CANNOT BE DAMAGED BY MAGNETIC OVERDRIVE
4 − OUTPUT TYPE − RATIOMETRIC
△5 THE OUTPUT IS CLAMPED AT 9.0 VDC MINIMUM, 9.5 VDC TYPICAL
△6 ARTWORK TYPICAL

NOMINAL TRANSFER CHARACTERISTICS AT 8.0 VDC



CAUTION ELECTROSTATIC SENSITIVE DEVICES
DO NOT OPEN OR HANDLE EXCEPT AT A STATIC FREE WORKSTATION
ESD SENSITIVITY: CLASS 3

THIRD ANGLE PROJECTION
SCALE 5 : 1
DO NOT SCALE PRINT

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE

ONE PLACE	(.0)	±.030
TWO PLACE	(.00)	±.015
THREE PLACE	(.000)	±.005
ANGLES		±

WEIGHT

ANSI Y14.5M−1982 APPLIES

CATALOG LISTING SS94A1E
ISSUE 5
PAGE 1 OF 1
RELEASE NO. PR−17167
REPLACES X89800−SS

REVISIONS

A	CO72441	J A S 18 MAY 92	
B	CO−95704	DLM 21 MAR 00	19MAY08
C	0038694	SSK 14APR08	BLR
D	0039911	SS 19MAY08	CHECK
			27 MAR 89
			T M M
			CHECK
			24 MAR 89
			K A G

DRAWN
RASTER
CHECK