MICRO SWITCH
a Honeywell Division
FED. MFG. CODE 91929

LINEAR OUTPUT HALL EFFECT TRANSDUCER

CATALOG LISTING
SS94A1 ★

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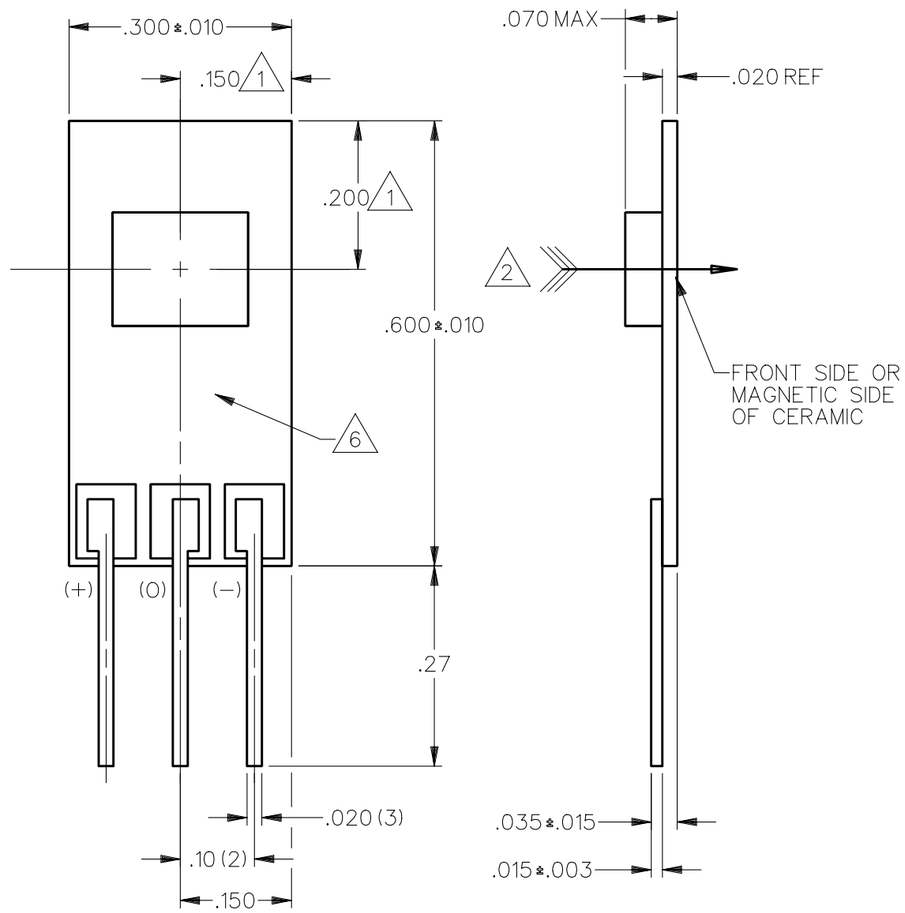
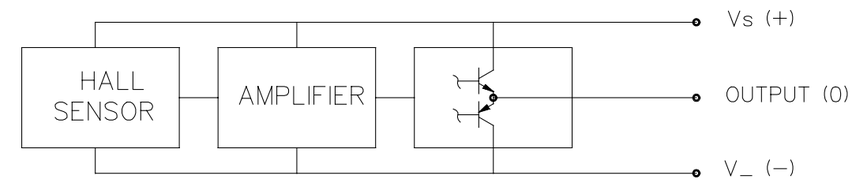


NOTES
1. CENTERLINE OF HALL CELL
2. THE + MAGNETIC FLUX IS IN THIS DIRECTION (THIS ASSUMES THE CONVENTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO THE SOUTH POLE OF THE MAGNET)
3 – THE DEVICE CANNOT BE DAMAGED BY MAGNETIC OVERDRIVE
4 – OUTPUT TYPE – RATIOMETRIC
5. THE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

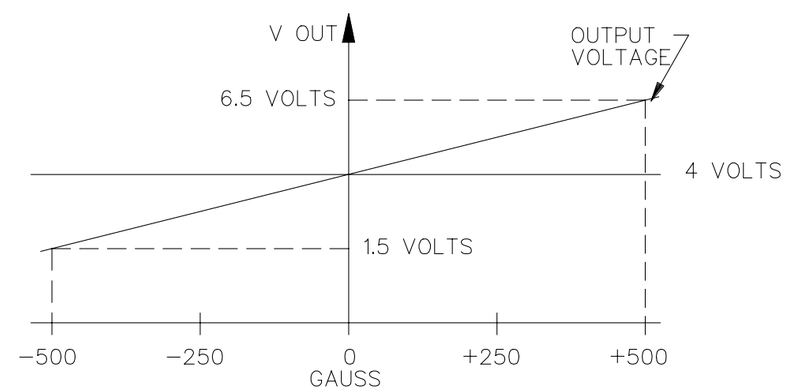
OPERATING CHARACTERISTICS

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	−.02		+.02	%/°C	−40°C TO +125°C
TEMP ERROR−GAIN	−.02		+.02	%/°C	−40°C TO +125°C

BLOCK DIAGRAM CURRENT SINKING OR SOURCING OUTPUT



NOMINAL TRANSFER CHARACTERISTICS AT 8.0 VDC



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 SS94A1 ★
ISSUE 5 M
REPLACES X83052−SS
RELEASE NO. DR−3524

REVISIONS
A C064262 J A S 13 SEPT 88
B C072441 J A S 18 MAY 92

CHECK
CHECK 13 SEPR 88 D A W
CHECK 13 SEPT 88 J A S
DRAWN
DDM/CAD