MICRO SWITCH
a Honeywell Division
FED. MFG. CODE 91929

# LINEAR OUTPUT HALL EFFECT TRANSDUCER

CATALOG LISTING
SS94A2

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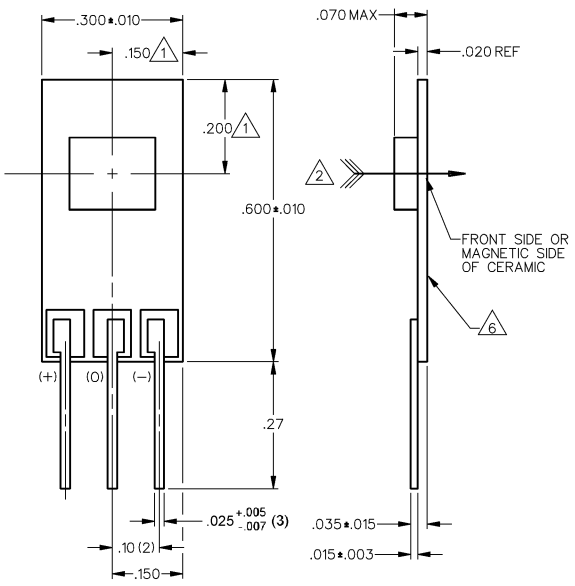
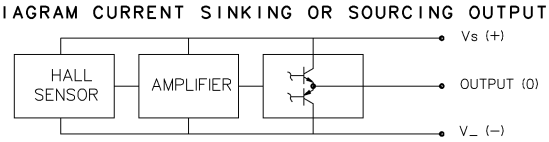
## OPERATING CHARACTERISTICS

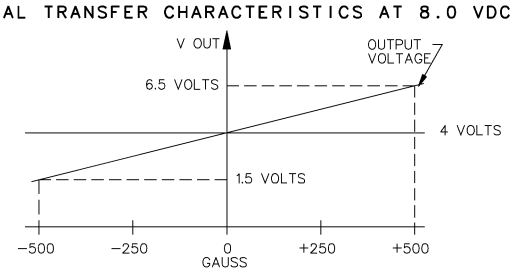
| PARAMETER | MIN | TYP | MAX | UNITS | CONDITIONS/REMARKS |
|---|---|---|---|---|---|
| SUPPLY VOLTAGE | 6.6 | 8.0 | 12.6 | VOLTS | −40°C TO +125°C |
| SUPPLY CURRENT | | 13 | 30 | mA | MAX @ 12.6 V @ −40°C |
| OUTPUT CURRENT | | | 1 | mA | SINKING OR SOURCING |
| OUTPUT SPAN | | .625 $V_S$ | | VOLTS | −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




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 THIS SIDE COATED WITH CONDUCTIVE MATERIAL WHICH IS ELECTRICALLY CONNECTED TO (−) TERMINAL

ANSI Y14.5M−1982 APPLIES

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ISSUE 5
REPLACES X89747−SS
RELEASE NO. PR−16879
REVISIONS
A C072441 J A S 19 MAY 92
B CO−95704 DLM 22 MAR 00
C 0038694 SSK 14APR00
D 0039911 SS 19MAY08
CHECK BLR 19MAY08
CHECK T M M 1 NOV 88
CHECK J A S 31 OCT 88
DRAWN RASTER

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

CAUTION ELECTROSTATIC SENSITIVE DEVICES
ESD SENSITIVITY: CLASS 3

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