MICRO SWITCH
a Honeywell Division
FED. MFG. CODE 91929

LINEAR OUTPUT HALL EFFECT TRANSDUCER

CATALOG LISTING
SS94B1A

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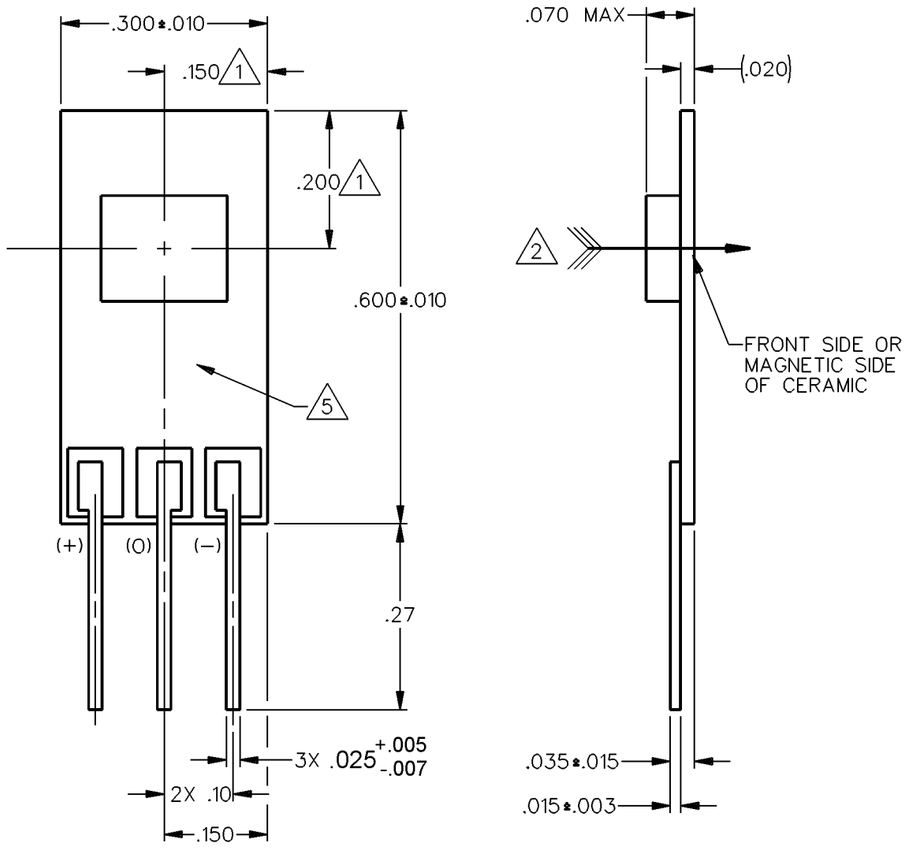

SPECIFICATIONS 6

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
SENSITIVITY 7	TA = 25°C	5.508	5.62	5.732	mV/GAUSS
Vout AT 380 GAUSS	TA = 25°C	.960	1.000	1.040	VOLTS
SUPPLY CURRENT	TA = 25°C		8	11	mA
OUTPUT CURRENT (SINK OR SOURCE)		1.0	2.0		mA
OUTPUT VOLTAGE SWING					
VOM − @ 1mA	−B APPLIED	8 .5	.4		VOLTS
VOM + @ 1mA	+B APPLIED	Vs −.5	Vs −.4		VOLTS
B LIMITS FOR LINEAR	−B MAX	330	275		GAUSS
OPERATION	+B MAX	950	1030		GAUSS
Vnull DRIFT	B = 0	−1.1		+1.1	mV/°C
SENSITIVITY DRIFT		−.03		+.03	%/°C
LINEARITY	−BMAX TO +BMAX	−1.0	−.5	0	% OF SPAN
SUPPLY VOLTAGE		4.5		10.5	VOLTS
OPERATING TEMP		−55		150	°C

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. ARTWORK IS TYPICAL
6. ALL CHARACTERISTICS ARE −40°C TO 125°C UNLESS OTHERWISE STATED WITH Vs = 5.000 VDC
7. MEASURED FROM 380 TO 700 GAUSS
8. SATURATION VOLTAGE WILL BE ≤ .2 VOLTS WHEN LOAD IS ≤ 50 μA

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

REPLACES X95129-SS
RELEASE NO. PR-19966
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ISSUE 4
CHECK
REVISIONS
A CO-95704 DLM 16 MAR 00
B 0038690 PRS 14 APR 08
C 0039911 SS 19MAY08
CHECK BLR 19MAY08
CHECK
CHECK
DRAWN DLM 16 MAR 00
RASTER