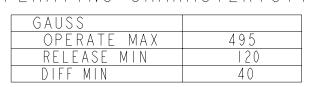
103**S**R12A-3



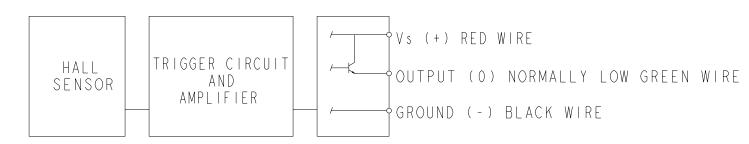
## ABSOLUTE MAXIMUM RATINGS

| SUPPLY VOLTAGE (Vs)             | -1.2 VDC TO +24.0 VDC                                 |
|---------------------------------|---|
| VOLTAGE EXTERNALLY              | +6.5 VOLTS DC MAX WITH SWITCH IN "OFF" CONDITION ONLY |
| APPLIED TO OUTPUT               | (Vs +4) VOLTS MAX WITH SWITCH IN "ON" CONDITION       |
| OUTPUT CURRENT                  | 40 mA (SOURCE PER OUTPUT)                             |
| TEMPERATURE OPERATE AND STORAGE | -40°C TO 100°C  |
| MAGNETIC FLUX                   | NO LIMIT, THE CIRCUIT CANNOT BE DAMAGED BY            |
|                                 | MAGNETICOVERDRIVE                                     |

## ELECTRICAL CHARACTERISTICS

|                       | MIN   | TYP      | MAX      | REMARKS                                     |
|-----------------------|-------|----------|----------|---|
|                       |       | 3 mA     | 6.5 mA   | V s = 6 V                                   |
| SUPPLY CURRENT /4     |       | 5 mA     | 10.0 mA  | V <sub>S</sub> =16V OFF CONDITION <u>/7</u> |
| OUTPUT VOLTAGE        | Vs-2  | Vs -1.5  |          | SÕURCING <u>2</u> 0 mA PER OUTPUT           |
| (OPERATED)            | VOLTS | VOLTS    |          | <u> </u>                                    |
| OUTPUT LEAKAGE        |       |          | 20 M A   | LEAKAGE INTO SWITCH OUTPUT                  |
| CURRENT (RELEASED)    |       |          |          |   |
| OUTPUT SWITCHING TIME |       |          |          |   |
| (SOURCING 20 mA)      |       |          |          |   |
| RISE TIME 4           |       | 0.2µ SEC | 1.54 SEC | 10% TO 90%                                  |
| FALL TIME             |       | O.IA SEC | 0.5µ SEC | 90% TO 10%                                  |

NOTE: THIS DEVICE IS NOT PROTECTED AGAINST HIGH ELECTRICAL NOISE. IF ERRATIC OPERATION OCCURS AFTER INSTALLATION INSTALL A CAPACITOR ACROSS THE INPUT TERMINALS (O.I MFD). IF ERRATIC OPERATION CONTINUES YOU MAY HAVE TO USE THE INDUSTRIAL DEVICES THAT MICRO SWITCH MANUFACTURES. PLEASE CONTACT YOUR LOCAL FIELD REPRESENTATIVE FOR INFORMATION



BLOCK DIAGRAM SHOWING CURRENT SOURCING OUTPUTS

FLUX ENTERING THE SOUTH POLE OF THE MAGNET WILL OPERATE THE SENSOR WHEN MAGNET IS POSITIONED AS SHOWN IN FIGURE 2. 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

LEADWIRES (INDIVIDUAL WIRES) ARE 24 GAGE STRANDED WITH IRRADIATED POLYETHYLENE INSULATION DATE CODE LOCATED IN THIS AREA

FROM -40°C TO 100°C AND 6 TO 24 VOLTS

CATALOG LISTING LOCATED IN THIS AREA SENSITIVE AREA IS LOCATED .050 BEHIND THE SENSING FACE VS IS THE UNREGULATED SUPPLY VOLTAGE

THIRD ANGLE PROJECTION DO NOT SCALE PRINT UNLESS OTHERWISE SPECIFIED TOLERANCES ARE ONE PLACE (.0)  $\pm .030$ TWO PLACES (.00) ±.015 THREE PLACES (.000) ± .005 ANGLES

WEIGHT

103**S**R12A-3

THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF MICRO SWITCH. A DIVISION OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF MICRO SWITCH. CATALOG LISTING **MAGNETICALLY** 

MICRO SWITCH a Honeywell Division FED. MFG. CODE 91929

OPERATED CYLINDRICAL HALL SWITCH

.240±.030(3)

 $60.000 \pm .300(3)$ 

 $1.000 \pm .040$ 

WIRE LEADS (3)  $\sqrt{2}$ 

- 15/32-32 UNS-2A

-HEX NUT (2)

— SENSING FACE 👍

-SENSOR WILL BE LOCATED

ANYWHERE WITHIN .025∅

FIG. I

+ V s

SWITCH SYMBOL

1035R12A-3

DR AW I NG NUMBER

10 Issue

ANCI YIA 5M-1982 APPIJES