

TO TEST THE SWITCH AGAINST THE SPECIFIED OPERATING CHARACTERISTICS THE SWITCH MUST BE PLACED IN A HELMHOLTZ COIL FIELD AND GIVEN THE FOLLOWING HISTORY: 35 GAUSS MINIMUM IN DIRECTION "A": 35 GAUSS MINIMUM IN DIRECTION "B", TEST TO THE OPERATING CHARACTERISTICS IN DIRECTION "B" (TFIS ASSUMES THE CONVENTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO THE SOUTH POLE OF A MAGNET)
THE SWITCH WILL OPERATE WITH THE FLUX FROM EITHER POLE OF A MAGNET
WHEN APPLIED IN THE DIRECTION AND LOCATION SHOWN
AT SUPPLY VOLTAGE OF 5 VDC AND OVER THE TEMPERATURE RANGE SPECIFIED

AT 24° ± 2° C, AND 5 VDC±0.5% SUPPLY VOLTAGE INTEGRATED CIRCUIT PLACEMENT TOLERANCE

PROTECTIVE HARD OVERCOAT SOLDER TERMINALS USING 60/40 ROSIN CORE SOLDER EMPLOYING A 750°F CONTROLLED TEMPERATURE 1/8 INCH CHISEL TIP SOLDERING IRON. CAUTION: THE SOLDER TIP SHOULD NEVER BE HELD ON THE TERMINAL FOR OVER 4 SECONDS IN ORDER TO AVOID DELAMINATION OF THE TERMINALS FROM THE CERAMIC

ABSOLUTE MAXIMUM RATINGS ARE THE EXTREME LIMITS THAT THE DEVICE WILL WITHSTAND WITHOUT DAMAGE TO THE DEVICE. HOWEVER, THE ELECTRICAL AND MAGNETIC CHARACTERISTICS ARE NOT GUARANTEED AS THE MAXIMUM LIMITS (ABOVE RECOMMENDED OPERATING CONDITIONS) ARE APPROACHED NOR WILL THE

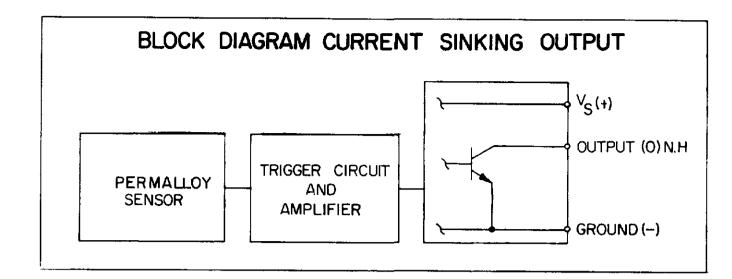
DEVICE NECESSARILY OPERATE AT ABSOLUTE MAXIMUM RATING THE MAGNETIC CHARACTERISTICS OF THE SWITCH MAY BE AFFECTED BY STRAY MAGNETIC FIELDS

10 FOR REFERENCE ONLY

SS21PE

B 0038691

VS 14APR08



| MAGNETIC CHARACTERIS | TICS <u>/1/3</u> /9\ |         |
|----------------------|----------------------|---------|
| TEMPERATURE RANGE    | -20°C TO 85°C ∕10\   | 25°C    |
|                      | MAX MIN              | MAX MIN |
| OPERATE GAUSS        | 25 9                 | 25 9    |
| RELEASE GAUSS        | 23 5                 | 23 5    |
| DIFFERENTIAL GAUSS   | 7 2                  | 7 2     |

ABSOLUTE MAXIMUM RATING

|                                      | <u> </u>  |
|--------------------------------------|---|
| SUPPLY VOLTAGE (VS)                  | 4.5 TO 5.5 VOLTS DC   |
| VOLTAGE EXTERNALLY APPLIED TO OUTPUT | +20.0 VDC MAX WITH SWITCH IN "OFF" CONDITION ONLY -0.5 VOLTS MIN WITH SWITCH IN "OFF" OR "ON' CONDITION |
| OUTPUT CURRENT                       | 20 mA   |
| TEMPERATURE                          | -20°C TO 85°C   |
| MAGNETIC FLUX                        | NO LIMIT, THE CIRCUIT CANNOT BE DAMAGED BY MAGNETIC OVERDRIVE   |

**ELECTRICAL CHARACTERISTICS** 

|   | MIN      | TYP     | MAX               | REMARKS                       |
|---|----------|---------|-------------------|-------------------------------|
| SUPPLY CURRENT (WITHOUT LOAD)             |          | 2.5 mA  | 10.0 mA<br>5.5 mA |                               |
| OUTPUT VOLTAGE 3                          |          | 0.25V   | 6.40V             | SINKING 20 mA MAX             |
| OUTPUT LEAKAGE 3<br>CURRENT (RELEASED)    |          |         | 10 ДА             | LEAKAGE INTO SWITCH<br>OUTPUT |
| OUTPUT SWITCHING 3<br>TIME (SINKING 8 mA) |          |         |                   |                               |
| RISE TIME                                 | <b>†</b> | 0.2 M S | 1.5 M S           | 10% TO 90%                    |
| FALL TIME                                 | 1        | 0.1 µ S | 0.5 M S           | 90% TO 10%                    |

THIRD ANGLE PROJECTION

SCALE **NONE** 



DO NOT SCALE PRINT UNLESS OTHERWISE SPECIFIED TOLERANCES ARE THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF MICRO SWITCH. A DIVISION OF ONE PLACE (.0) ±.030 HONEYWELL, THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF MICRO SWITCH. TWO PLACES (.00)  $\pm .015$ CATALOG LISTING MICRO SWITCH THREE PLACES (.000)  $\pm$ .005 SS21PE SOLID STATE SWITCH a Honeywell Division ANGLES WEIGHT

MASTER REDUCED FED. MFG. CODE 91929

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Honeywell: SS21PE