



MAGNETIC CHARACTERISTICS $\sqrt{1}\sqrt{3}\sqrt{9}$				
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 $\Delta$	
SUPPLY VOLTAGE (V <sub>S</sub> )	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) $\Delta$		2.5 mA	10.0 mA 5.5 mA	MAX (OPERATED) MAX (RELEASED)
OUTPUT VOLTAGE (OPERATED) $\Delta$		0.25V	0.40V	SINKING 20 mA MAX
OUTPUT LEAKAGE CURRENT (RELEASED) $\Delta$			10 $\mu$ A	LEAKAGE INTO SWITCH OUTPUT
OUTPUT SWITCHING TIME (SINKING 8 mA) $\Delta$				
RISE TIME		0.2 $\mu$ S	1.5 $\mu$ S	10% TO 90%
FALL TIME		0.1 $\mu$ S	0.5 $\mu$ S	90% TO 10%

- NOTES**
- $\Delta$  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" (THIS ASSUMES THE CONVENTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO THE SOUTH POLE OF A MAGNET)
  - $\Delta$  THE SWITCH WILL OPERATE WITH THE FLUX FROM EITHER POLE OF A MAGNET WHEN APPLIED IN THE DIRECTION AND LOCATION SHOWN
  - $\Delta$  AT SUPPLY VOLTAGE OF 5 VDC AND OVER THE TEMPERATURE RANGE SPECIFIED AT 24° ± 2° C, AND 5 VDC ± 0.5% SUPPLY VOLTAGE
  - $\Delta$  INTEGRATED CIRCUIT PLACEMENT TOLERANCE
  - $\Delta$  PROTECTIVE HARD OVERCOAT
  - $\Delta$  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
  - $\Delta$  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
  - $\Delta$  THE MAGNETIC CHARACTERISTICS OF THE SWITCH MAY BE AFFECTED BY STRAY MAGNETIC FIELDS
  - $\Delta$  FOR REFERENCE ONLY

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**MICRO SWITCH**  
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**SOLID STATE SWITCH**

CATALOG LISTING  
**SS21PE**

FED. MFG. CODE 91929

THIRD ANGLE PROJECTION		
SCALE NONE		
DO NOT SCALE PRINT		
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE		
ONE PLACE	(.0)	±.030
TWO PLACES	(.00)	±.015
THREE PLACES	(.000)	±.005
ANGLES		±
WEIGHT		

MASTER REDUCED