

SR4P2-B9

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A C075307

J A F
25 MAY 93

B C081515A

G J W
11 DEC 95

# OPERATING CHARACTERISTICS 1 &

OPERATE MAX	25 GAUSS		
RELEASE MIN	5 GAUSS		
DIFF MIN	2 GAUSS		
(TEMP RANGE -20°C TO 85°C)			

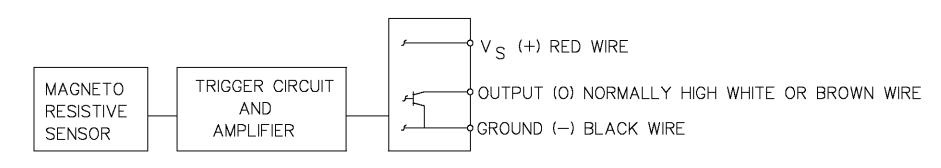
### M SR4P2-B9

### ABSOLUTE MAXIMUM RATINGS

SUPPLY VOLTAGE (VS) /7	6 VDC TO 24 VDC
VOLTAGE EXTERNALLY	+24 VOLTS DC MAX WITH SWITCH IN "OFF" CONDITION ONLY
APPLIED TO OUTPUT	-0.5 VOLTS MAX WITH SWITCH IN "OFF" OR
	"ON" CONDITION
OUTPUT CURRENT	20 mA
TEMPERATURE	-40°C TO 85°C
OPERATE AND STORAGE	
MAGNETIC FLUX	NO LIMIT, THE CIRCUIT CANNOT BE DAMAGED BY
	MAGNETIC OVERDRIVE

## ELECTRICAL CHARACTERISTICS

	MIN	TYP	MAX	REMARKS		
SUPPLY CURRENT 4		2.5 mA	13.5 mA	$Vs = 6-24 \text{ VOLTS } \sqrt{2}$		
OUTPUT VOLTAGE 5		0.25 V	0.4 V	SINKING 20 mA MAX		
(OPERATED)						
OUTPUT LEAKAGE /5\			10 д А	LEAKAGE INTO SWITCH OUTPUT		
CURRENT (RELEASED)						
OUTPUT SWITCHING TIME						
RISE TIME \(\sigma \)		0.2μ SEC	1.5 µ SEC	10% TO 90%		
FALL TIME		0.1 μ SEC	0.5 д SEC	90% TO 10%		



#### BLOCK DIAGRAM SHOWING CURRENT SINKING OUTPUTS

#### NOTES

1 FLUX ENTERING THE SOUTH POLE OR THE NORTH 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.

2 22 GUAGE PVC INSULATED CONDUCTORS WITH MOLDED PVC JACKET

/3\ DATE CODE LOCATED IN THIS AREA

<u>√4</u>\ AT 24±2°C

5 AT SUPPLY VOLTAGE OF 6 TO 24 VOLTS AND FULL TEMPERATURE RANGE

6 CATALOG LISTING LOCATED IN THIS AREA

/7\ Vs IS THE UNREGULATED SUPPLY VOLTAGE

8 TORQUE ON PLASTIC NUTS MUST NOT EXCEED 12 INCH POUNDS

9 - THE MAGNETIC CHARACTERISTICS OF THE SWITCH MAY BE AFFECTED

BY STRAY MAGNETIC FIELDS  $\cancel{10}$  Jacket is cut back 1.37 from free end of Leads

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MAGNETICALLY OPERATED CYLINDRICAL HALL SWITCH

CATALOG LISTING SR4P2-B9

SCALE 3:1 DO NOT SCALE PRINT UNLESS OTHERWISE SPECIFIED TOLERANCES ARE (.0)  $\pm .030$ ONE PLACE TWO PLACES (.00) ±.015 THREE PLACES (.000) ±.005 **ANGLES** 

WEIGHT

THIRD ANGLE PROJECTION