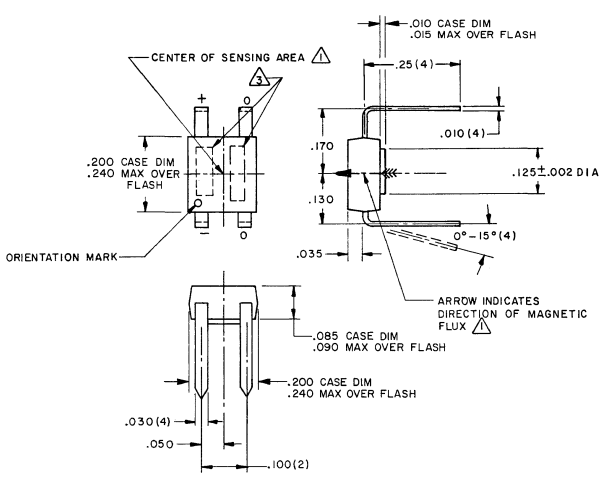


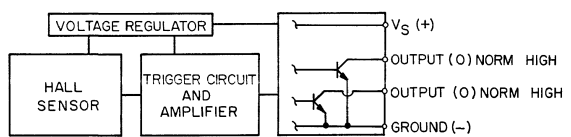
6133S SERIES  
 CHART 1  
 ISSUE 8  
 PAGE 1 OF 1  
 RELEASE NO. PR-4114  
 DATE 13 FEB 01  
 GRT  
 RASTER



MAGNETIC CHARACTERISTICS				ISSUE NUMBER	RELEASE NUMBER	CATALOG LISTING
TEMP RANGE	-40°C TO 150°C	-40°C TO 100°C	0°C TO 70°C	5	DR-1212-3	613SS4
OPERATE MAX	495	480	460			
RELEASE MIN	40	120	150	4	PR-4415	613SS2
DIFF MIN	33	33	33			
OPERATE MAX	600	580	560			
RELEASE MIN	50	150	185			
DIFF MIN	40	40	40			
OPERATE MAX						
RELEASE MIN						
DIFF MIN						

**ABSOLUTE MAXIMUM RATING**

SUPPLY VOLTAGE (V <sub>S</sub> )	-1.2 TO +20 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
LOAD ON OUTPUT	20MA
TEMPERATURE	-40°C TO +150°C OPERATING
MAGNETIC FLUX	NO LIMIT, THE CIRCUIT CANNOT BE DAMAGED BY MAGNETIC OVERDRIVE



BLOCK DIAGRAM SHOWING CURRENT SINKING OUTPUT

**ELECTRICAL CHARACTERISTICS**

PARAMETER	MIN	TYP	MAX	REMARKS
SUPPLY CURRENT		3 mA 5 mA	10.0 mA 10.0 mA	PLUS LOAD CURRENT V <sub>S</sub> = 6 VOLTS V <sub>S</sub> = 16 VOLTS
OUTPUT VOLTAGE (OPERATED)		0.15 VOLTS	0.4 VOLTS	SINKING 10 MA MAX
OUTPUT LEAKAGE CURRENT (RELEASED)			10 μA	LEAKAGE INTO SWITCH OUTPUT
OUTPUT SWITCHING TIME (SINKING 10MA)				
RISE TIME		0.2 μs	1.5 μs	10% TO 90%
FALL TIME		0.1 μs	0.5 μs	90% TO 10%

- NOTES**
- 1 TO ACTUATE THE DEVICE, THE SOUTH POLE OF THE MAGNET OR MAGNETIC FLUX GENERATOR MUST BE PRESENTED TO THE CENTER OF THE FRONT SURFACE OF THE DEVICE. (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 THE MAGNETIC FIELD STRENGTH (GAUSS) REQUIRED TO CAUSE THE SWITCH TO CHANGE STATE (OPERATE AND RELEASE) WILL BE AS SPECIFIED IN THE OPERATING CHARACTERISTICS. TO TEST THE SWITCH AGAINST THE SPECIFIED OPERATING CHARACTERISTICS, THE SWITCH MUST BE PLACED IN A UNIFORM MAGNETIC FIELD
  - 3 CATALOG LISTING AND LOT NO. WILL BE STAMPED ON THE PACKAGE
  - 4 AT SUPPLY VOLTAGE OF 6 TO 16 VDC AND OVER THE TEMPERATURE RANGE SPECIFIED
  - 5 AT 24±2°C
  - 6 V<sub>S</sub> IS THE UNREGULATED SUPPLY VOLTAGE

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**MICRO SWITCH**  
a Honeywell Division

**SOLID STATE SWITCH**  
**MAGNETICALLY OPERATED**

CATALOG LISTING  
**613SS SERIES**  
**CHART 1**

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