

Solid State Hall Effect

Position Sensor

SR13/15 Series

OPERATING CHARACTERISTICS -40°C TO 125°C, 3.8 TO 30 VDC

	Min.	Typ.	Max.	Remarks
Supply voltage	3.8	—	30	VDC
Current consumption	—	—	13	mA
Output voltage (operated)	—	—	0.40	Sinking 10 mA max.
Sink current (operated)	—	—	20	mA
Output leakage current (released)	—	—	5 μ A	$V_{OUT} = 30$ VDC, $V_{CC} = 30$ VDC
Output switching time				
Rise, 10 to 90%	—	1.5 μ s.	1.5 μ s	$V_{CC} = 12$ V, $R_L = 1.6$ K Ω , $C_L = 20$ pF
Fall, 90 to 10%	—	15 μ s	1.5 μ s	
Operating Temperature	-40°C to +150°C (-40°F to +302°F)			

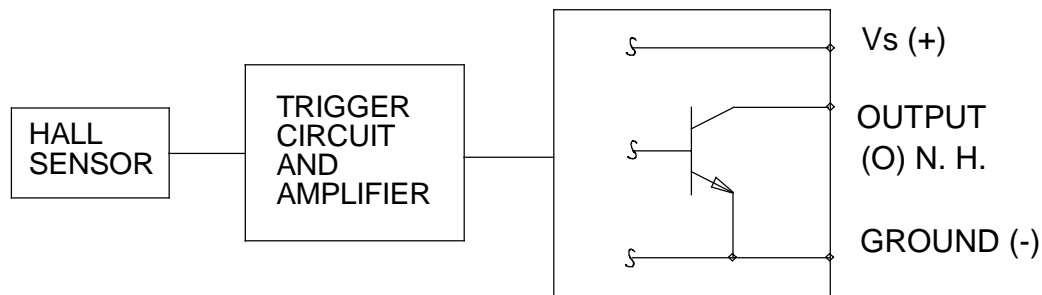
MAGNETIC CHARACTERISTICS

	SR13C-A1	SR13D-A1	SR13F-A1	SR13R-A1	SR15C-A3
Magnetic Type	Unipolar	Unipolar	Unipolar	Latching	Unipolar
25°C					
Max. Op.	180	115	390	85	180
Min. Rel.	75	20	235	-85	75
Min. Dif.	25	20	30	50	25
-20°C to 85°C					
Max. Op.	215	135	435	110	215
Min. Rel.	60	15	200	-110	60
Min. Dif.	10	8	30	50	10

NOTICE

Bipolar Hall effect sensors may have an initial output in either the On or Off state if powered up with an applied magnetic field in the differential zone (applied magnetic field > Brp and < Bop). Honeywell recommends allowing 10 μ s for output voltage to stabilize after supply voltage has reached 5 volts.

BLOCK CIRCUIT WIRING DIAGRAM



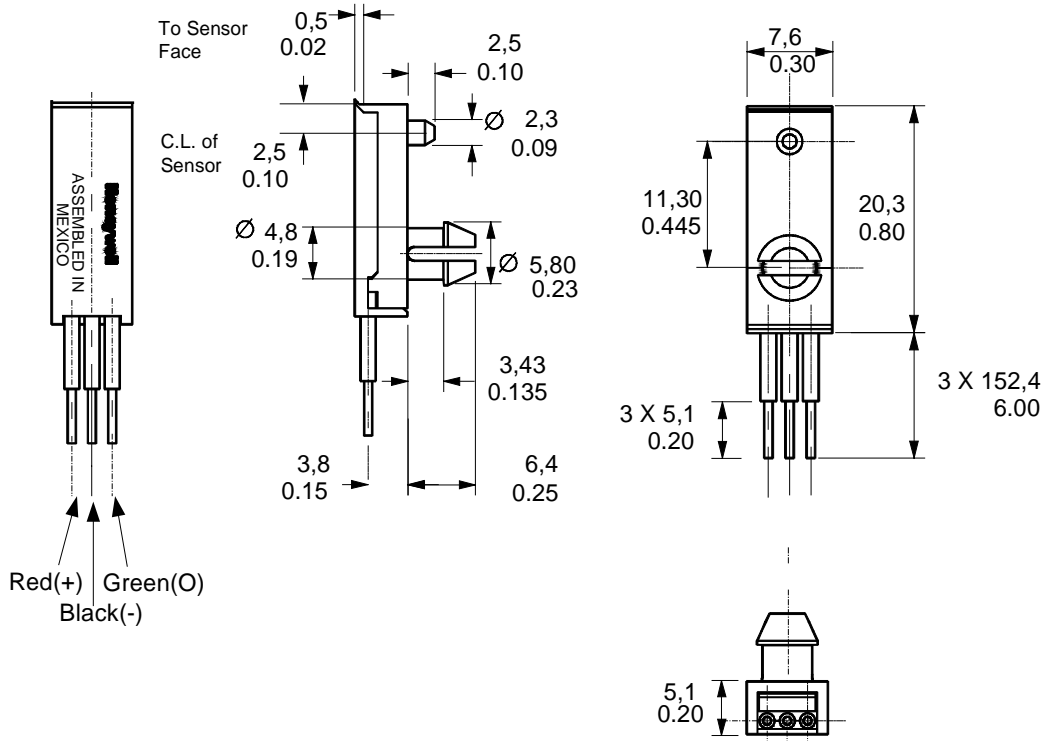
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MOUNTING DIMENSIONS (for reference only) mm/in

SNAP-IN DIGITAL POSITION SENSOR (SR13C-A1, SR13D-A21, SR13F-A1, SR13R-A1)



FLAT MOUNT DIGITAL POSITION SENSOR (SR15C-A3)

