

Solid State Sensors

Digital Position Sensors

2SSP Series



FEATURES

- Low gauss operation can extend sensing distance to one inch or more, depending on magnet size
- Digital current sinking output
- Omnipolar – can be operated with either North or South magnetic pole
- Operating speed: 0 to over 100 kHz
- Small size: .18 x .18 inch
- 3-pin, in-line PC board terminals on .100-inch mounting centers
- Operating temperature range: -20° to 85°C (-4° to 185°F)
- Surface mount style available – 2SSP-S

OPERATION

2SSP Series position sensors have magnetoresistive material integrated on silicon and encapsulated in a plastic package. The integrated circuit provides a digital output in response to very low magnetic fields. Though this signal is identical to our digital Hall effect sensors, it can be achieved by magnetoresistive sensors at much greater sensor-to-magnet distances. For example, the 2SSP sensing distance is approximately one inch, when operated by a MICRO SWITCH 101MG3 magnet.

OPERATING MODE

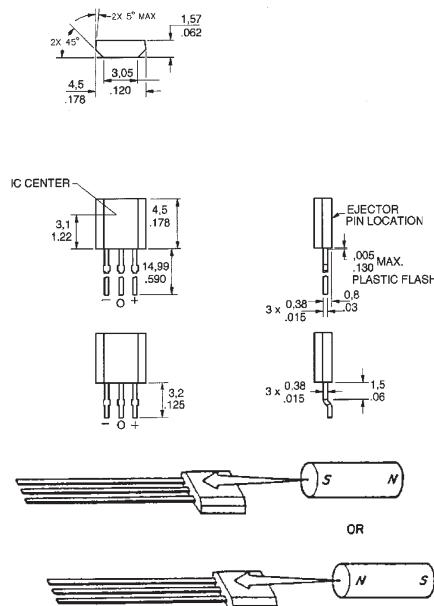
(Arrows indicate direction of magnetic flux.)

2SSP sensors are operated by magnetic fields (North or South pole) **parallel** to the magnetoresistive element.

NOTE: Due to the inherent high sensitivity of 2SSP sensors, stray magnetic fields which are parallel to the IC may affect operation.

MOUNTING DIMENSIONS

(For reference only)



Digital

2SSP ORDER GUIDE

Catalog Listing	2SSP/2SSP-S	
Supply Voltage (VDC)	6 to 24	
Supply Current (mA max.)	13.5	
Output Type	Sink	
Output Voltage (V) @ 20mA	.40 max.	
Output Current (mA max.)	20	
Leakage Current (μA max.)	10	
Magnetics Type	Omnipolar	
Magnetic Char. & Temp. -20 to 85°C	Max. Op.	Gauss 25 mT 2.5
	Min. Rel.	5 0.5
	Max. Dif.	7 0.7
25°C Typ.	Typ. Op.	15 1.5
	Typ. Rel.	11 1.1
	Typ. Dif.	4 0.4

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mT = milliTesla