



Representative photograph, actual product appearance may vary.

Due to regional agency approval requirements, some products may not be available in your area. Please contact your regional Honeywell office regarding your product of choice.

SS494B

SS494 Series Miniature Ratiometric Linear Hall-Effect Sensor; radial lead IC

Features

- Digital current sinking output
- Quad-Hall design virtually eliminates mechanical stress effects
- Temperature compensated magnetics
- Operate/release points can be customized
- High output current capability
- Operate/release points symmetrical around zero gauss (bipolar/latch)
- Package material: Plaskon 3300H
- Surface mount version available: SS400-S (with cut and formed leads)

Description

SS400 Series position sensors have a thermally balanced integrated circuit over full temperature range. The negative compensation slope is optimized to match the negative temperature coefficient of lower cost magnets. Bipolar, latching and unipolar magnetics are available.

Band gap regulation provides extremely stable operation over 3.8 Vdc to 30 Vdc supply voltage range.

NOTE: Interruption of power to a latching device may cause the output to change state when power is restored. If a magnetic field of sufficient strength is present, the sensor output will be in the condition dictated by the magnetic field.



SS494B

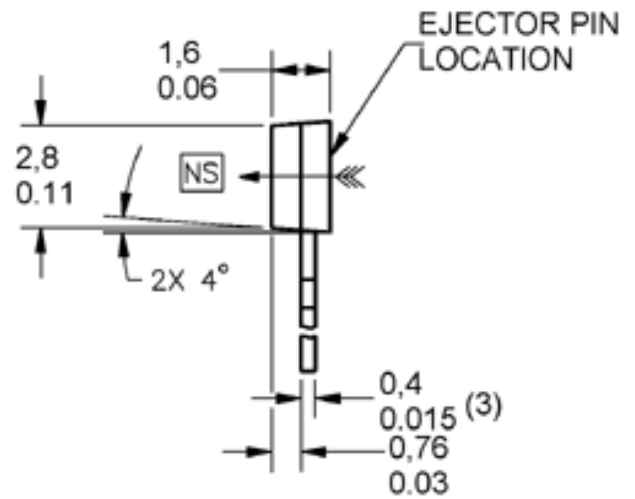
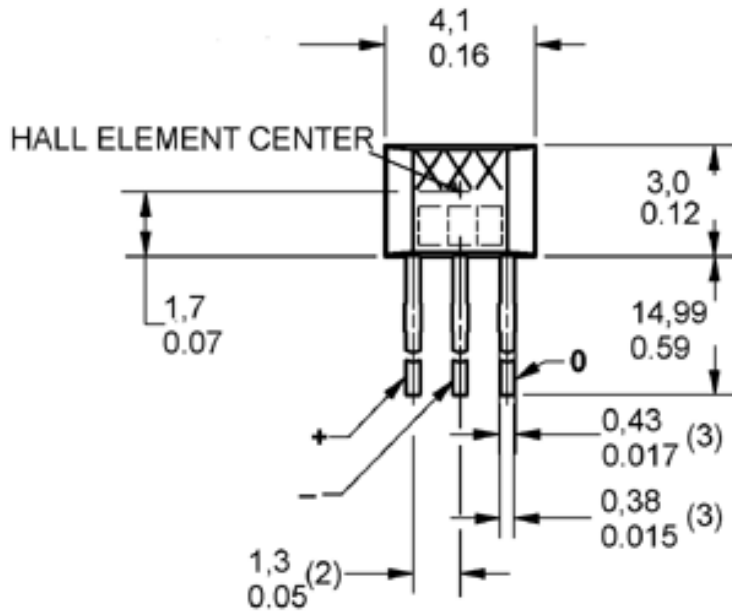
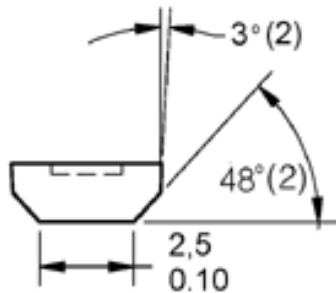
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Product Specifications	
Product Type	Hall-Effect Linear Position Sensor
Package Quantity/Type	Available in 1,000/Bag
Package Style	Radial Lead IC
Supply Voltage	4.5 Vdc to 10.5 Vdc
Output Type	Sink/Source
Magnetic Actuation Type	Ratiometric
Operating Temperature Range	-40 °C to 150 °C [-40 °F to 302 °F]
Output Voltage	0.2 Vdc to ($V_S - 0.2$ Vdc) typ., 0.4 Vdc to ($V_S - 0.4$ Vdc) min.
Linearity (% of Span)	-1.0 % typ., 1.5 % max.
Output Voltage Span (min.)	0.4 Vdc to ($V_S - 0.4$ Vdc)
Availability	Global
Supply Current (max. @ 25 °C)	8.7 mA
Sensitivity @ 25 °C	5.0 mV \pm 0.4 mV/G
Output Voltage Swing (Negative G)	0.4 Vdc
Output Voltage Swing (Positive G)	$V_S - 0.4$ Vdc
Temperature Error (@ 25 °C) Null Shift (%/°C)	-0.08 % min., 0.08 % max.
Temperature Error (@ 25 °C) Sensitivity (%/°C)	-0.02 % min., 0.08 % max.
Output Current Typical Source ($V_S > 4.5$ Vdc)	1.5 mA
Output Current Minimum Source ($V_S > 4.5$ Vdc)	1 mA
Output Current Minimum Sink ($V_S > 4.5$ Vdc)	0.6 mA
Output Current Minimum Sink ($V_S > 5.0$ Vdc)	1 mA
Magnetic Range (typ.)	-42 mT to 42 mT [-420 G to 420 G]
Magnetic Range (min.)	-37.5 mT to 37.5 mT [-375 G to 375 G]
Output Voltage Span (typ.)	0.2 Vdc to ($V_S - 0.2$ Vdc)
Null (Output @ 0 G)	2.50 Vdc \pm 0.075 Vdc
Response Time (μ s)	3 μ s
Series Name	SS494 Series

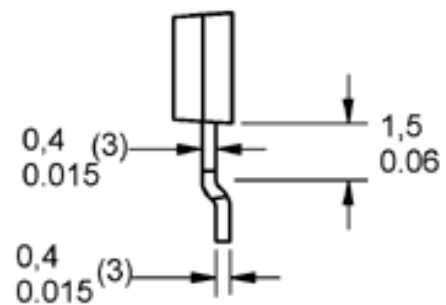
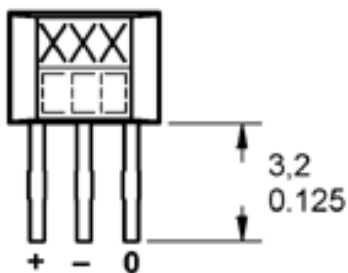


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SURFACE MOUNT STYLE (-S)



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 WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

 WARNING

MISUSE OF DOCUMENTATION

- The information presented in this product sheet (or catalog) is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

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