quad Hall sensing element minimizes the effects of mechanical or thermal stress on the output. The positive temperature coefficient of the sensitivity helps compensate for the negative temperature coefficients of low cost magnets, providing a robust design over a w ide temperature range.

NOTE: Products ordered in bulk packaging (plastic bags) may not have perfectly straight leads as a result of normal handling and shipping operations. Please order tape packaging option for applications w ith critical lead straightness requirements.

Supporting Documentation

Dimensions | **Required Accessories—Magnets** | **Engineering Drawing**

Product Specifications	
Product Type	Miniature Hall-Effect Linear Position Sensor IC
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
Termination Type	PC Board
Magnetic Actuation Type	Ratiometric
Operating Temperature Range	-40 °C to 150 °C [-40 °F to 302 °F]
Storage Temperature	-55 °C to 165 °C [-67 °F to 329 °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.
Output Voltage Span (min.)	0.4 Vdc to (V_s - 0.4 Vdc)
Availability	Global
Supply Current (max. @ 25 °C)	8.7 mA @ 5 Vdc
Sensitivity @ 25 °C	5.0 mV ± 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_Null_Shift_2	± 0.08
Temperature_Error_25 Sensitivity_1	-0.02 min., 0.06 max.
Output_Current_Typical_Source_45	1.5 mA
Output_Current_Minimum_Source_45	1 mA
Output_Current_Minimum_Sink_45	0.6 mA
Output_Current_Minimum_Sink_5	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 ± 0.075 Vdc
Response Time (µs)	3 µs
Series Name	SS494