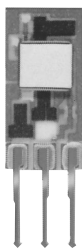


Solid State Sensors
Analog Position Sensors

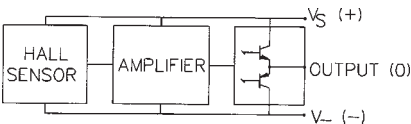
SS94B1 Series



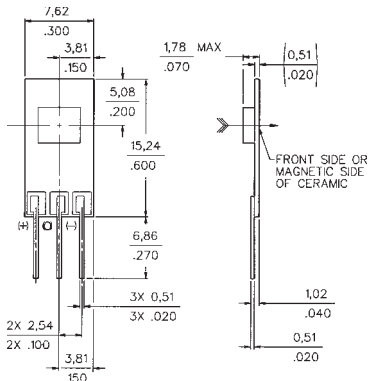
FEATURES

- Single current sinking or current sourcing output
- Three-pin in-line printed circuit board terminals
- Standard .100" mounting centers
- Laser trimmed thin film and thick film resistors minimize sensitivity variations and compensate for temperature variations

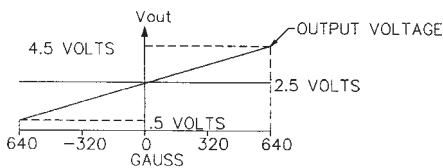
BLOCK DIAGRAM



MOUNTING DIMENSIONS
(for reference only)

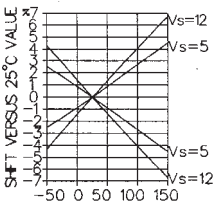


TRANSFER CHARACTERISTICS

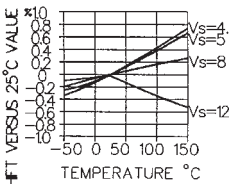


OUTPUT CHARACTERISTICS
(for reference only)

NULL SHIFT LIMITS VERSUS TEMP



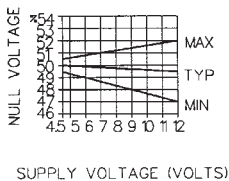
TYPICAL NULL SHIFT VERSUS TEMP



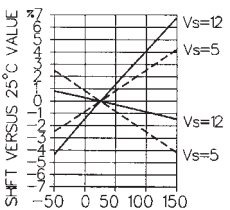
SS94 ORDER GUIDE

Catalog Listing	SS94B1
Supply Voltage (VDC)	4.5 to 12 Performance @ 5 VDC
Supply Current (mA)	8 typ., 11 max.
Output Current/Type	Ratiometric/Sinking or Sourcing 1 mA typ., 2 mA max.
Output Voltage Swing Negative gauss Positive gauss	0.4 V typ. Vs - 0.4 V typ.
Magnetic Characteristics @ 25°C, 5 VDC (-67.0 to +67.0 mT, typ.) Span Null (Offset @ 0 gauss) Sensitivity (mV per gauss) Linearity (% span)	4.0 V (-670 to +670 gauss, typ.), 2.5 ± 0.03 V 3.125 ± 0.063 -0.5 ± 0.5
Temperature Error (@ 25°C) Null Shift (%/°C) Sensitivity (%/°C)	± 0.03 ± 0.03

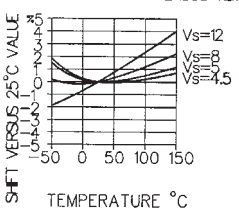
RATIO OF Vnull TO Vsupply



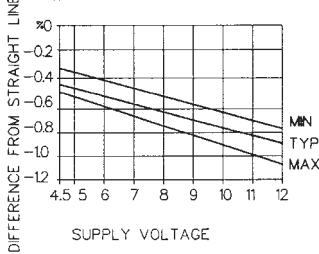
GAIN SHIFT LIMITS VERSUS TEMP



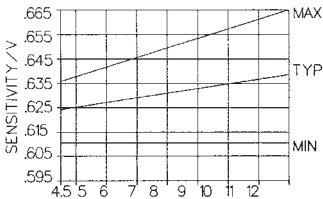
TYPICAL GAIN SHIFT VERSUS TEMP



LINEARITY VERSUS SUPPLY VOLTAGE
END POINTS OF SPAN METHOD

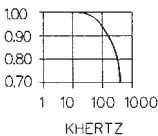


SENSITIVITY/V VERSUS SUPPLY VOLTAGE
(mV/GAUSS/V)



TO CALCULATE SENSITIVITY, MULTIPLY
Y-AXIS VALUE TIMES SUPPLY VOLTAGE

TYPICAL FREQUENCY RESPONSE
Vs=8.0
RL=33.K PARALLEL WITH 100PF



Vout
Vout @ 1KHZ

SUPPLY CURRENT VERSUS TEMP

