Honeywell

Honeywell Sensing and Control



SS41D



SS40 Series Bipolar Hall-Effect Digital Position Sensor; radial lead IC package

Features

Small size Reverse pow er polarity protection Current sinking output Sensitive magnetic characteristics Operating speed from 0 kHz to over 100 kHz

Speed and RPM sensor Brushless DC motor commutation Motor and fan control Magnetic encoding Tachometer, counter pickup

Potential Applications

Disc speed, tape rotation sensing Flow -rate sensing

Description

SS41-Series Bipolar Hall Effect sensors respond to alternating North and South poles.

A built-in regulator provides stable operation over 4.5 Vdc to 24 Vdc supply voltage range, and internal circuitry prevents sensor damage in case the supply voltage polarity is accidentally reversed. The SS41 Series Bipolar Hall-effect sensors are small, versatile digital Hall-effect devices that are operated by the magnetic field from a permanent magnet or an electromagnet. The open-collector sinking output voltage is easily interfaced with a wide variety of electronic circuits. **NOTE:** These digital Hall sensors have an operating temperature range of -40 C to 125 C [-40 F to 257 F], appropriate for commercial, consumer, and industrial environments.

Product Specifications	
Product Type	Hall-Effect Digital Position Sensor IC
Package Style	Radial Lead IC
Supply Voltage	4.5 Vdc to 24.0 Vdc
Output Type	Sink
Termination Type	PC Board
Magnetic Actuation Type	Bipolar
Operating Temperature Range	-40 °C to 150 °C [-40 °F to 302 ° F]
Storage Temperature	-40 °C to 150 °C [-640 °F to 302 ° F]
Output Voltage	0.4 Vdc max.
Switching Time Rise (10 % to 90 %)	1.5 µs max.
Switching Time Fall (90 % to 10 %)	1.0 µs max.
Availability	Global
Supply Current (max. @ 25 °C)	15 mA
Output Current (max.)	20 mA
Operate Point @ 25 °C	34.0 mT [340 G] max.
Release Point @ 25 °C	-34.0 mT [-340 G] min.
Leakage Current max.	10 µA
Differential	4.0 mT [40 G] min.
Series Name	SS40

