



## SS341RT Unipolar Hall-Effect Digital Position Sensors

### General Description:

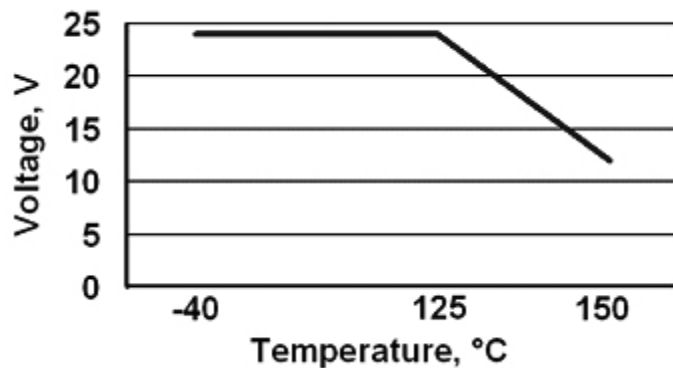
The SS340RT Series and SS440R Series sensors are small, versatile digital Hall-effect devices that are operated by the magnetic field from a permanent magnet or an electromagnet. They are designed to respond to a single pole: North (SS340RT Series) or South (SS440R Series).

These unipolar sensors are supplied in three different magnetic sensitivities to meet a wide range of potential applications. The SS341RT and SS441R offer the highest sensitivity, with a typical operating point of 85 G at 25 °C [77 °F]; the SS343RT and SS443R offer medium sensitivity with 125 G typical at 25 °C [77 °F]; the SS349RT and SS449R offer the lowest sensitivity, requiring 350 G typical to operate at 25 °C [77 °F].



### Key Features:

- Sub miniature package size (SS340RT Series) supplied on tape and reel allows for a compact design with automated component placement, helping to reduce manufacturing costs
- Simple activation from a single pole and multiple magnetic sensitivities (high, medium and low) make this product suitable in a variety of potential motion control, lid closure detection, and displacement sensing applications
- Low voltage 3 V capability helps reduce power Consumption
- Built-in reverse polarity protection protects the device from potential damage during installation
- Thermally balanced integrated circuit provides for stable operation over a wide temperature range, from -40 °C to 150 °C [-40 °F to 302 °F]
- RoHS-compliant materials meet Directive 2002/95/EC



## Applications:

- Door or lid closure detection
- Speed and RPM (revolutions per minute) sensing in fitness equipment
- Flow rate sensing in industrial processes, appliances, or water softeners
- Damper or valve position control in industrial, HVAC or residential or commercial applications
- Robotic control (cylinder position monitoring)
- Float-based fluid level sensing
- Displacement sensor in hospital beds or medical equipment
- Medication bin monitor on portable drug carts
- Printer head position sensing

## Related Products Information:

Mfr Part #	Farnell #	Newark #	Description
SS341RT	1784727	50R8554	SS340RT Series, unipolar, Hall-effect digital position sensor, high sensitivity
SS343RT	1784728	50R8555	SS340RT Series, unipolar, Hall-effect digital position sensor, medium sensitivity
SS349RT	1784731	50R8556	SS340RT Series, unipolar, Hall-effect digital position sensor, low sensitivity
SS441R	1784735	50R8558	SS440R Series, unipolar, Hall-effect digital position sensor, high sensitivity
SS443R	1784736	50R8559	SS440R Series, unipolar, Hall-effect digital position sensor, medium sensitivity
SS449R	1784737	50R8560	SS440R Series, unipolar, Hall-effect digital position sensor, low sensitivity