

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.

#### SS443A

# SS400 Series Unipolar Hall-Effect Digital Position Sensor; radial lead IC package

#### **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.

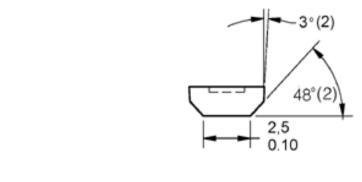
**NOTE:** Interruption of power to a latching device may cause the output to change state when power is restored. If a magnetic field of sufficient strength is present, the sensor output will be in the condition dictated by the magnetic field.

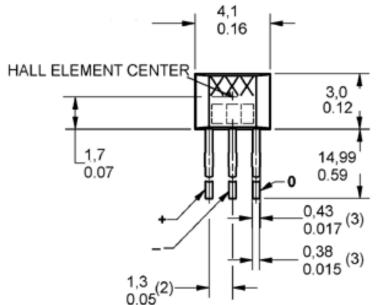
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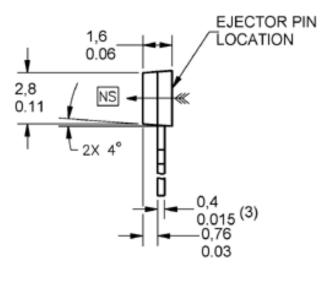
#### **SS443A**

| Product Specifications             |                                     |
|------------------------------------|-------------------------------------|
| Product Type                       | Hall-Effect Digital Position Sensor |
| Package Quantity/Type              | Available in 1,000/Bag              |
| Package Style                      | Radial Lead IC                      |
| Supply Voltage                     | 3.8 Vdc to 30.0 Vdc                 |
| Output Type                        | Sink                                |
| Magnetic Actuation Type            | Unipolar                            |
| Operating Temperature Range        | -40 °C to 150 °C [-40 °F to 302 °F] |
| Output Voltage                     | 0.4 Vdc max.                        |
| Switching Time Rise (10 % to 90 %) | 0.05 μs typ., 1.5 μs max.           |
| Switching Time Fall (90 % to 10 %) | 0.15 μs typ., 1.5 μs max.           |
| Availability                       | Global                              |
| Supply Current (max. @ 25 °C)      | 7.5 mA typ.                         |
| Output Current (max.)              | 20 mA                               |
| Operate Point @ 25 °C              | 14.5 mT [145 G] typ.                |
| Release Point @ 25 °C              | 11.5 mT [115 G] typ.                |
| Leakage Current max.               | 10 μΑ                               |
| Differential                       | 3.0 mT [30 G] typ.                  |
| Series Name                        | SS400 Series                        |

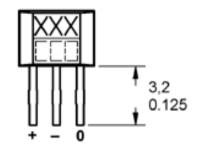
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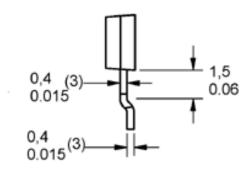






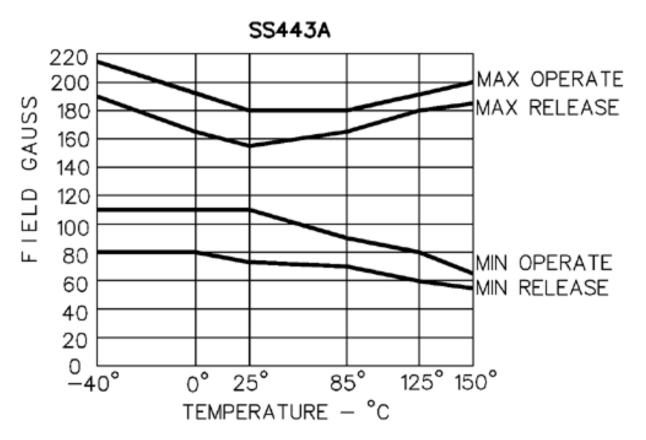
## SURFACE MOUNT STYLE (-S)





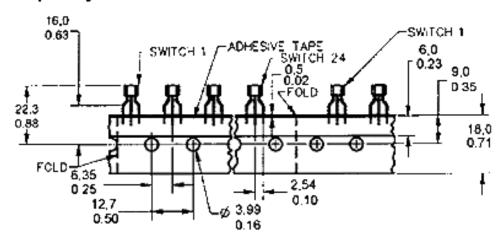
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## **SS443A**

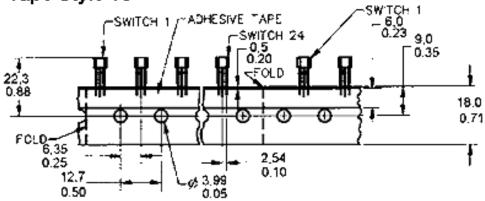


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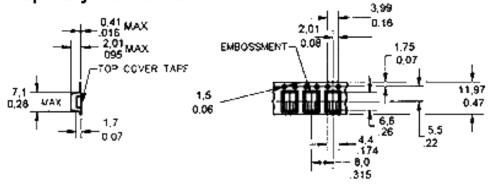
## Tape Style T2



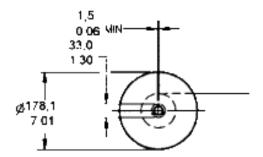
## Tape Style T3



### Tape Style SP & RP



### Direction of Feed from Reel



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#### 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.

## **A** 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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