Honeywell

Interactive Catalog Replaces Catalog Pages

Honeywell Sensing and Control has replaced the PDF product catalog with the new Interactive Catalog. The Interactive Catalog is a power search tool that makes it easier to find product information. It includes more installation, application, and technical information than ever before.



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Sensing and Control
Honeywell Inc.
11 West Spring Street
Freeport, Illinois 61032

Solid State Sensors
Digital Position Sensors



FEATURES
- 3.8-30 VDC supply voltage
- Digital current sinking output
- 3 pin in-line PCB terminals
- Quad-Hall design virtually eliminates mechanical stress effects
- Temperature compensated magnetics
- Operate/release points can be customized
- Bipolar, unipolar, latching magnetics
- High output current capability –50 mA absolute maximum
- Operate/release points symmetrical around zero gauss (bipolar/latch)
- Operating temperature range of –40 to +150°C (–40 to +302°F)
- Package material: Plaskon 3300H
- Surface mount version available: SS400-S (with cut and formed leads)

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 to 30 VDC supply voltage range. SS400 sensors are capable of continuous 20 mA sinking output, and may be cycled as high as 50 mA maximum.

NOTICE
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.

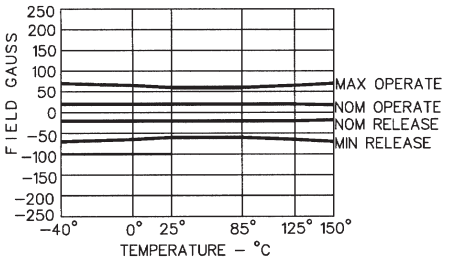
ORDER GUIDE

Catalog Listing		SS411A	SS413A	SS441A	SS443A	SS449A	SS461A	SS466A
Magnetic Type		Bipolar	Bipolar	Unipolar	Unipolar	Unipolar	Latching	Latching
Supply Voltage (VDC)		3.8 to 30	3.8 to 30	3.8 to 30	3.8 to 30	3.8 to 30	3.8 to 30	3.8 to 30
Supply Current (max.)		10 mA	10 mA	10 mA	10 mA	10 mA	10 mA	10 mA
Output Type		Sink	Sink	Sink	Sink	Sink	Sink	Sink
Output Voltage (max.)		.40 V	.40 V	.40 V	.40 V	.40 V	.40 V	.40 V
Output Current, max.*		20 mA	20 mA	20 mA	20 mA	20 mA	20 mA	20 mA
Output Leakage Current, max.		10 µA	10 µA	10 µA	10 µA	10 µA	10 µA	10 µA
Output Switching Time V_{CC}=12 V, R_L=1.6 K, C=20 pF	Rise (10-90%)	.05 µs typ. 1.5 µs max.	.05 µs typ. 1.5 µs max.	.05 µs typ. 1.5 µs max.	.05 µs typ. 1.5 µs max.	.05 µs typ. 1.5 µs max.	.05 µs typ. 1.5 µs max.	.05 µs typ. 1.5 µs max.
	Fall (90-10%)	.15 µs typ. 1.5 µs max.	.15 µs typ. 1.5 µs max.	.15 µs typ. 1.5 µs max.	.15 µs typ. 1.5 µs max.	.15 µs typ. 1.5 µs max.	.15 µs typ. 1.5 µs max.	.15 µs typ. 1.5 µs max.
Magnetic Characteristics		G mT	G mT	G mT	G mT	G mT	G mT	G mT
–40°C	Max. Op.	70 7.0	140 14.0	135 13.5	215 21.5	435 43.5	110 11.0	200 20.0
	Min. Rel.	–70 –7.0	–140 –14.0	20 2.0	80 8.0	210 21.0	–110 –11.0	–200 –20.0
	Min. Dif.	15 1.5	20 2.0	15 1.5	25 2.5	30 3.0	50 5.0	200 20.0
0°C	Max. Op.	65 6.5	140 14.0	117 11.7	190 19.0	400 40.0	90 9.0	185 18.5
	Min. Rel.	–65 –6.5	–140 –14.0	20 2.0	80 8.0	230 23.0	– 90 – 9.0	–185 –18.5
	Min. Dif.	15 1.5	20 2.0	18 1.8	25 2.5	30 3.0	50 5.0	200 20.0
25°C	Max. Op.	60 6.0	140 14.0	115 11.5	180 18.0	390 39.0	85 8.5	180 18.0
	Min. Rel.	–60 –6.0	–140 –14.0	20 2.0	75 7.5	235 23.5	– 85 – 8.5	–180 –18.0
	Min. Dif.	15 1.5	20 2.0	20 2.0	25 2.5	30 3.0	50 5.0	200 20.0
85°C	Max. Op.	60 6.0	140 14.0	120 12.0	180 18.0	400 40.0	85 8.5	180 18.0
	Min. Rel.	–60 –6.0	–140 –14.0	15 1.5	70 7.0	215 21.5	– 85 – 8.5	–180 –18.0
	Min. Dif.	12 1.2	20 2.0	15 1.5	15 1.5	30 3.0	50 5.0	190 19.0
125°C	Max. Op.	65 6.5	140 14.0	123 12.3	190 19.0	410 41.0	100 10.0	180 18.0
	Min. Rel.	–65 –6.5	–140 –14.0	15 1.5	60 6.0	200 20.0	–100 –10.0	–180 –18.0
	Min. Dif.	12 1.2	20 2.0	8 0.8	10 1.0	30 3.0	50 5.0	160 16.0
150°C	Max. Op.	70 7.0	140 14.0	125 12.5	200 20.0	420 42.0	110 11.0	185 18.5
	Min. Rel.	–70 –7.0	–140 –14.0	10 1.0	55 5.5	185 18.5	–110 –11.0	–185 –18.5
	Min. Dif.	10 1.0	20 2.0	5 0.5	5 0.5	30 3.0	50 5.0	140 14.0

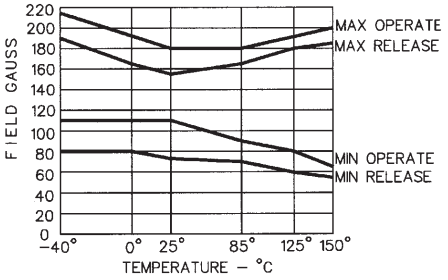
* Absolute maximum output current is 50 mA for all SS400 listings. G = Gauss. mT = milliTesla.
Note: For SS400 on tape with straight or formed leads on 0.100″ centers, contact the 800 number. One box contains 5,000 sensors.

OPERATE AND RELEASE POINTS

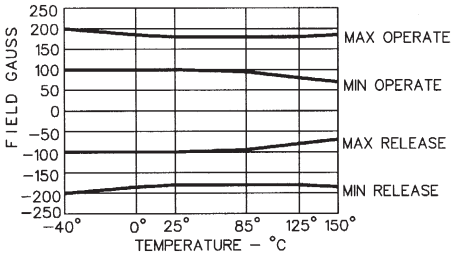
SS411A



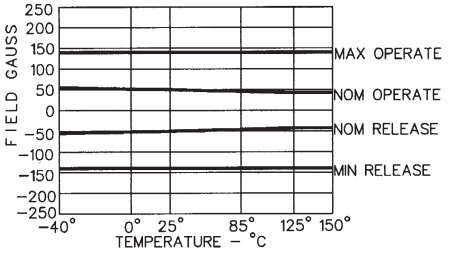
SS443A



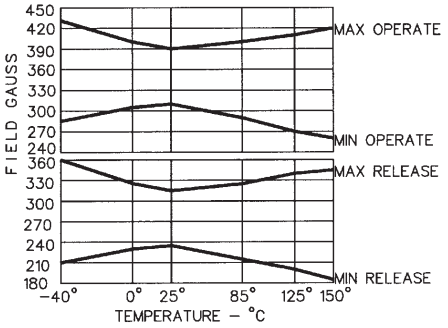
SS466A



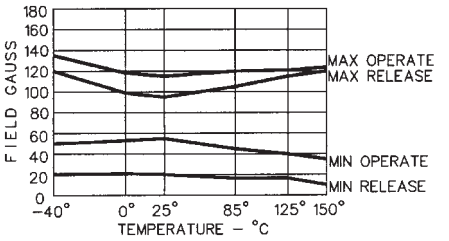
SS413A



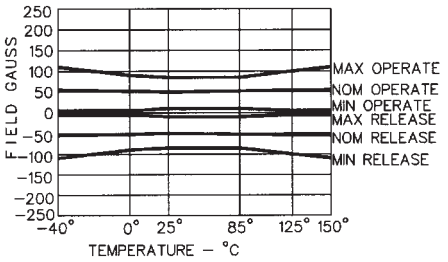
SS449A



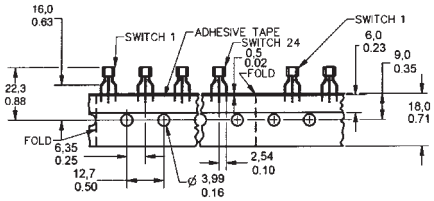
SS441A



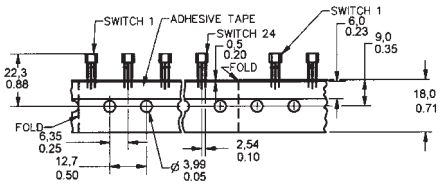
SS461A



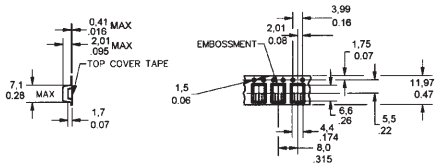
MOUNTING DIMENSIONS (For reference only)



TAPE STYLE T2

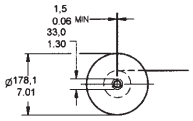


TAPE STYLE T3

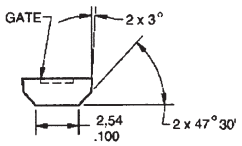


TAPE STYLE SP & RP

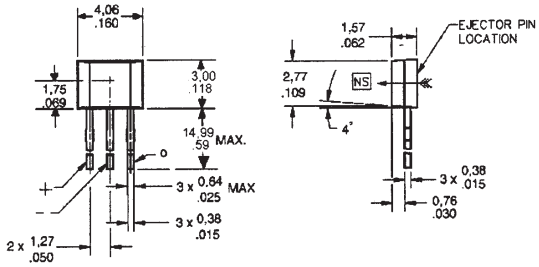
Tape styles T2 and T3 are supplied in Ammopack (Fanfold) format, in cardboard boxes. Each box contains 5000 sensors.



DIRECTION OF FEED FROM REEL



STANDARD LEAD VERSION



SURFACE MOUNT (-S) VERSION



REDUCED LEAD LENGTH (-R) VERSION

