# **Solid State Sensors** Digital Position Sensors

Digital

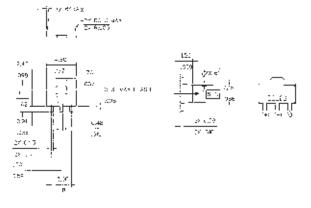


#### FEATURES

- Small-size SOT89 style package (.177×.136×.059 in.) surface mounts on PC boards and flexible circuits
- Available in bulk or on tape and reelReverse polarity protection
- Current sinking output
- Sensitive magnetic characteristics
- Compatible with pick-and-place equipment for automated assembly
- operationsOperating speed: 0 to over 100 kHz

SS11 sensors are available on tape and reel for high volume, automated pick and place equipment. Each reel contains 1,000 sensors.

## MOUNTING DIMENSIONS (For reference only)



**NOTE: DO NOT wave solder this product.** This process may negatively affect sensor performance and reliability, and will void MICRO SWITCH's warranty. MICRO SWITCH recommends an infrared reflow process with peak temperatures not to exceed 200°C (392°F) for 10 seconds maximum.

SS1 ORDER GUIDE (Add "T" suffix to catalog listing for tape and reel as shown below.)

Catalog Listings	SS11 (SS11T)
Magnetic Type	Bipolar
Supply Voltage (VDC)	4.5 to 24
Supply Current (mA)	4 typ. 8.7 max.
Sinking Output (mA)	20 max.
Output Voltage (V)	0.15 typ. 0.40 max.
Output Leakage Current, Released (µA) (Leakage into sensor)	10
Output Switching Time (µs) Rise (10% to 90%)	0.2 typ. 1.5 max.
Fall (90% to 10%)	0.5 typ. 1.0 max.
Magnetic Characteristics* @ 0 to 85°C, 32 to 185°F	G mT
Max. Operate	150 15.0
Min. Release	-150 -15.0
Min. Differential	50 5.0
@ -40 to 125°C, -40 to 257°F Max. Operate	200 20.0
Min. Release	-200 -20.0
Min. Differential	40 4.0
@ 25°C, 77°F typ. Typ. Operate	40 4.0
Typ. Release	- 40 - 4.0
Typ. Differential	80 8.0



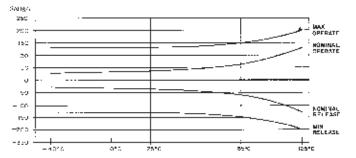
\*G = Gauss

mT = milliTesla.

## APPLICATION INFORMATION



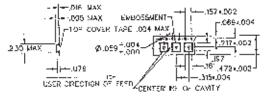
SS11 Operate and Release vs. Temperature



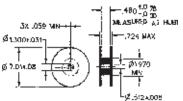
Wave soldering may negatively affect sensor performance.

#### TAPE AND REEL DIMENSIONS

Таре







NOTE: One reel contains 1,000 sensors.