

SOLID STATE SENSOR

DS Series



Digital Vane in Miniature switch package

Features

- Fits mounting dimension of popular snap-action switches.
- Tested to over 10 million operations.
- Two actuator mounting positions.
- Available with lever, roller and simulated roller actuators.
- Solid state sinking output using hall effect technology
- Mates with Amp 102241-1 or equivalent.

Material Specifications:

- Case, cover, actuating button: Thermoplastic Polyester (PBT) UL94V-0

Applications:

- Pedal position sensing
- Door/lid interlock
- Joystick position sensing
- End of travel sensing

Specifications

Supply voltage (VDC)

4.5 to 24

Supply Current

15mA max at 25°C

Output Type

Sink

Output Current (mA max.)

20

Sensor State (Button at rest)

Normally OFF

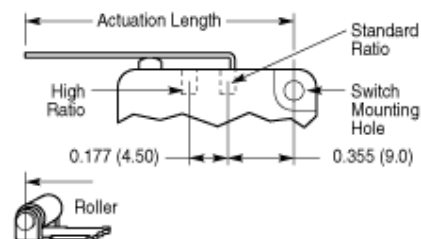
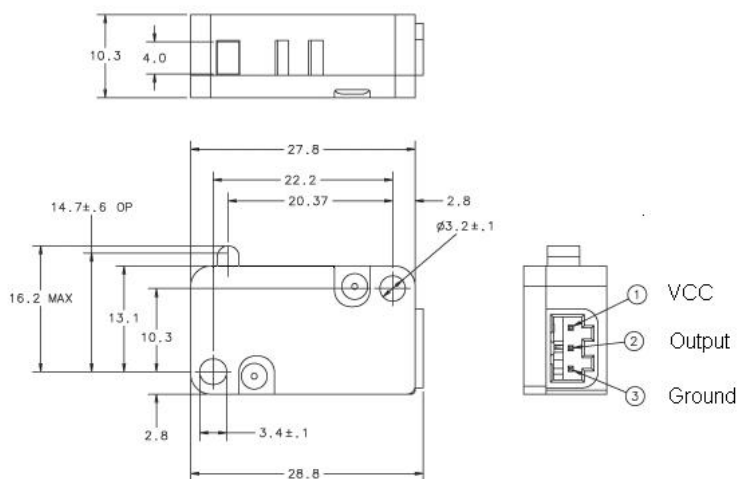
Operating Temperature

-40°C to 85°C

Storage Temperature

-40°C to 125°C

Dimensions mm



Note: Sensor requires the use of an external pull-up resistor. The value is dependent on the supply voltage. See chart below.

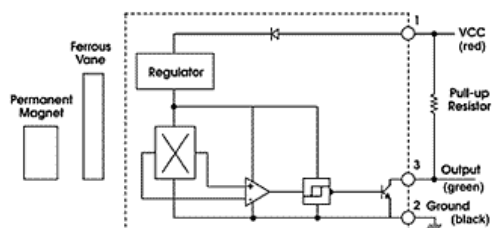
UL File No: E23301



Part Number Examples:

PART NUMBER	Lever Style	Lever Actuation Length (inch/mm)	Lever Actuator Ratio	Max Pretravel (inch/mm)	Operate Point (inch/mm)	Operate Point Tolerance (+/- inch/cm)	Min Overtravel (inch/mm)	Max Movement Differential (inch/max)	Max Operating Force (g)
DS1101AA	N/A	N/A	N/A	0.06	0.58	0.02	0.04	0.01	
				1.50	14.70	0.60	1.00	0.20	84
DS1101JA	SS Leaf	0.87	Std.	0.08	0.60	0.03	0.04	0.01	
		22.0		2.08	15.2	0.69	1.04	0.23	84
DS1101KA	SS Leaf	1.04	High	0.14	0.6	0.05	0.07	0.02	
		26.5		3.48	15.2	1.15	1.73	0.38	53
DS1101JD	SS Leaf	1.4	Std.	0.17	0.60	0.06	0.08	0.02	
		35.7		4.27	15.2	1.42	2.14	0.47	43
DS1101KD	SS Leaf	1.58	High	0.28	0.60	0.09	0.14	0.03	
		40.2		7.13	15.2	2.38	3.58	0.79	28
DS1101JJ	SS Leaf	2.34	Std.	0.32	0.60	0.11	0.16	0.04	
		58.4		8.08	15.2	2.69	4.04	0.9	23
DS1101KJ	SS Leaf	2.52	High	0.53	0.60	0.18	0.27	0.06	
		63.9		13.48	15.2	4.49	6.74	1.5	14
DS1101RA	Roller	0.81	Std.	0.07	0.81	0.02	0.04	0.01	
		20.5		1.85	20.57	0.62	0.92	0.21	99
DS1101TA	Roller	.99	High	0.12	.81	0.04	0.06	0.01	
		25.0		3.08	20.57	1.03	1.54	0.34	59
DS1101SC	Simulated Roller	1.29	Std.	0.15	0.73	0.05	0.07	0.02	
		32.7		3.8	18.5	1.27	1.9	0.42	48
DS1101UC	Simulated Roller	1.47	High	0.25	0.73	0.08	0.12	0.03	
		37.2		6.34	18.5	2.11	3.17	0.7	29

Open Collector Sinking Block Diagram



Specifications subject to change without notice.

Recommended pull-up resistor values

Volts DC:	5	9	12	15	24
Ohms:	1K	1.8K	2.4K	3K	3K

Contact

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