

SIP Switch

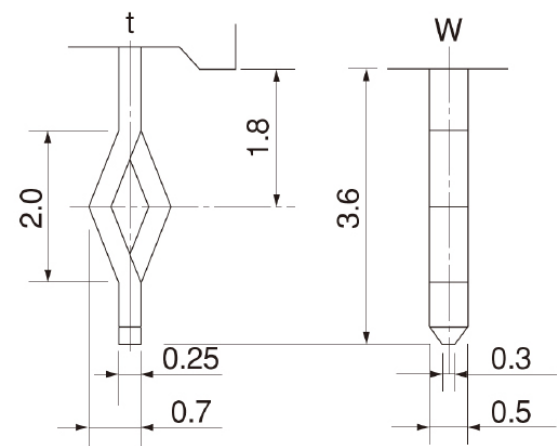
SX Series

SIPSwitch

Through Hole

2, 4, 6, 8, 10P

PCB Terminal



Quantity in each Package

Poles	Q'ty in 1 Magazine (pcs)	SXV		SXH	
		Number of Magazines in 1 Box (sticks)	Total Q'ty per 1 box (pcs)	Q'ty in 1 Magazine (pcs)	Total Q'ty per 1 box (pcs)
2	50	100	5,000	70	3,500
4	30	100	3,000	70	2,100
6	25	100	2,500	70	1,750
8	20	100	2,000	70	1,400
10	15	100	1,500	70	1,050

Cautions on Handling Products

1. Cleaning agents such as alcohol-based, petroleum-based, ketone-based, and chlorine-based solvents can be used.
2. The positions of Knobs are set to OFF upon Delivery. Please keep these positions during mounting, soldering, and washing.
3. These Products are RoHS compliant.

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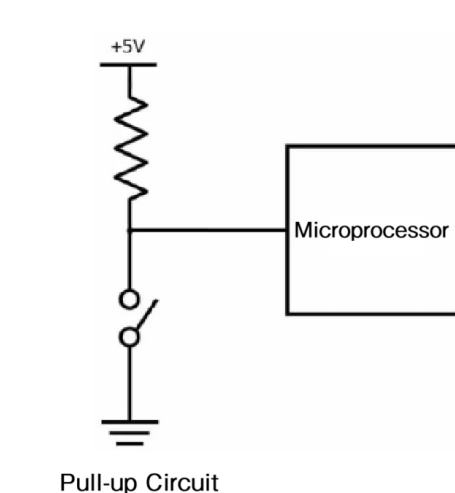
SIPSwitch

Through Hole

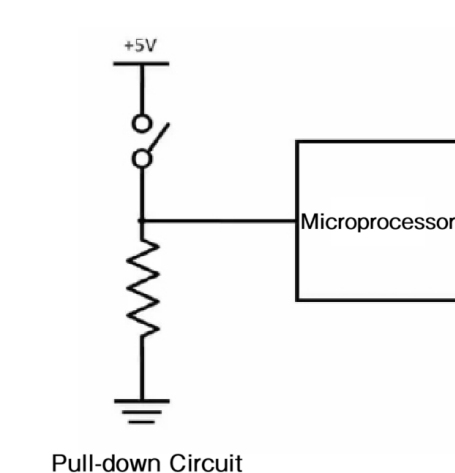
2, 4, 6, 8, 10P

Tips for Switches

Pull-up and Pull-down of a microprocessor



As a fundamental concept of microprocessors, one of the common stumbling blocks when first creating circuits using a microprocessor is understanding pull-up and pull-down resistors. As you may know, microprocessors operate using digital control with two values: High (1) and Low (0). Typically, the High level is connected to a power supply voltage known as Vdd (e.g., 5V, 3.3V, 1.7V, etc.). On the other hand, assuming that an unconnected pin will naturally be Low (0) is, in a sense, incorrect. This is because when a microprocessor's pin is left unconnected, it is said to be "floating" or in a "Hi-Z (high impedance)" state, which is electrically unstable and prone to noise and interference.



Therefore, it is standard practice to connect each pin to either the power supply (Vdd) or ground (Vss) through a resistor. When connected to Vdd, this is called a "pull-up" (which sets the default state to High), and when connected to Vss, it is called a "pull-down" (which sets the default state to Low). This approach electrically forces each pin into either the High or Low state.

Incidentally, in the case of a pull-up configuration, if a DIP switch is connected, turning the switch ON connects the line to ground, resulting in a digital Low (0). When the switch is OFF, the line remains pulled up to High (1).