## Series 206/208 <br> Through-Hole DIP Switch

- Available with SPST, SPDT, DPST, 3PST circuit choices
- Available with low profile, standard, or extended actuator heights.

Consult the ordering information for options.

- RoHS compliant
- Optional top tape seal for board spray washing


## Description

The terminals are molded into the thermoset base and provide an electrostatic discharge shield rating to 22 KV when the OFF side terminals are connected to ground. The optimized contact design incorporating a dimple-toflat surface wiping interface provides long-term contact corrosion resistance making this the ideal choice for any HVAC, server, or security system.

## Ordering Information



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## Electrical Specifications

| Parameter | Conditions \& Remarks | Min | Max | Unit |
| :---: | :---: | :---: | :---: | :---: |
| Contact Resistance (206) | Initial <br> At end of life |  | $\begin{gathered} 50 \\ 100 \end{gathered}$ | milliohms |
| Contact Resistance (208) | Initial <br> At end of life |  | $\begin{aligned} & \hline 100 \\ & 500 \\ & \hline \end{aligned}$ | milliohms |
| Insulation Resistance | Between insulated terminals | 1000 |  | Megohms |
| Dielectric Strength | 500 VAC between adjacent switches |  | 1 | minute |
| Switch Capacitance | Between adjacent closed switches |  | 5.0 | pF |
| Nonswitching Rating |  |  | $\begin{gathered} 100 \\ \text { or } \\ 50 \end{gathered}$ | $\begin{gathered} \mathrm{mA} \\ \text { or } \\ \mathrm{VDC} \end{gathered}$ |
| Circuit | SPST <br> SPDT <br> DPST <br> 3PST | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | $\begin{gathered} 12 \\ 6 \\ 6 \\ 4 \end{gathered}$ | Position <br> Position <br> Position <br> Position |

## Mechanical and Environmental

| Actuation Life (206) | 10,000 cycles switching 50mA @ 24VDC |
| :--- | :--- |
| Actuation Life (208) | 2,000 cycles switching 50mA @ 24VDC |
| Soldering | Maximum wave temperature, $260^{\circ} \mathrm{C}$ for 5 seconds <br> with no contact inconsistencies, greater than 1 microsecond |
| Shock | Per MIL-STD-202F, method 204D, condition $\mathrm{B}(.06$ " or 15G's between 10 HZ to 2K HZ) with <br> no contact inconsistencies greater than 1 microsecond |
| Vibration | Bottom epoxy seal optional <br> Optional top tape seal for board spray washing |
| Seal | Special side or top marking available-consult CTS |
| Marking | Standard anti-static tube packaging |
| Packaging: | $-55^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| Operating Temperature <br> Range | $-55^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| Storage Temperature <br> Range |  |

## Mechanical Specifications

Figure 1 - SPST


DIMENSION: $\frac{\mathrm{mm}}{\text { inch }}$

Figure 2 - SPDT

schematic


Horizontal dotted line represnts the movable actuator, there is no internal connection between adjacent terminals. Two adjacent terminals for the same switch position must be connected on the PCB to create a single pole.

DIMENSION: $\frac{\mathrm{mm}}{\text { inch }}$

Figure 3 - DPST


SCHEMATIC


Horizontal dotted line represnts the movable actuator, there is no internal connection between adjacent terminals.

DIMENSION: $\frac{\mathrm{mm}}{\text { inch }}$

Figure 4-3PST


Figure 5 - Low Profile Actuators (SPST \& SPDT only)


Figure 6 - Extended Actuators (SPST only)


DIMENSION: $\frac{\mathrm{mm}}{\text { inch }}$

| "A" Overall Dimensions | Number of Switch Positions | Actuation | Part Number | Both Bottom and Top Sealed | Low Profile Both Bottom and Top Sealed |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3.96 / . 156 |  | SPST | 206/208-1S | - | - |
| 7.26 / . 286 | 2 | SPST | 206/208-2 | 206/208-2ST | 206/208-2LPST |
| 9.80 / . 386 | 3 | SPST | 206/208-3 | 206/208-3ST | 206/208-3LPST |
| 12.34/ . 486 | 4 | SPST | 206/208-4 | 206/208-4ST | 206/208-4LPST |
| 14.88 / . 586 | 5 | SPST | 206/208-5 | 206/208-5ST | 206/208-5LPST |
| 17.42 / . 686 | 6 | SPST | 206/208-6 | 206/208-6ST | 206/208-6LPST |
| 19.96 / . 786 | 7 | SPST | 206/208-7 | 206/208-7ST | 206/208-7LPST |
| 22.50 / . 886 | 8 | SPST | 206/208-8 | 206/208-8ST | 206/208-8LPST |
| 25.04 / . 986 | 9 | SPST | 206/208-9 | 206/208-9ST | 206/208-9LPST |
| $27.58 / 1.086$ | 10 | SPST | 206/208-10 | 206/208-10ST | 206/208-10LPST |
| $32.66 / 1.286$ | 12 | SPST | 206/208-12 | 206/208-12ST | 206/208-12LPST |
| 7.26 / . 286 | 1 | SPDT | 206-121 | 206-121ST | 206/208-121LPST |
| 12.34/ . 486 | 2 | SPDT | 206-122 | 206-122ST | 206/208-122LPST |
| 17.42 / . 686 | 3 | SPDT | 206-123 | 206-123ST | 206/208-123LPST |
| 22.50 / . 886 | 4 | SPDT | 206-124 | 206-124ST | 206/208-124LPST |
| $27.58 / 1.086$ | 5 | SPDT | 206-125 | 206-125ST | 206/208-125LPST |
| $32.66 / 1.286$ | 6 | SPDT | 206-126 | 206-126ST | 206/208-126LPST |
| 7.26 / . 286 | 1 | DPST | 206-211 | 206-211ST |  |
| 12.34/ . 486 | 2 | DPST | 206-212 | 206-212ST |  |
| 17.42 / . 686 | 3 | DPST | 206-213 | 206-213ST |  |
| 22.50 / . 886 | 4 | DPST | 206-214 | 206-214ST |  |
| $27.58 / 1.086$ | 5 | DPST | 206-215 | 206-215ST |  |
| $32.66 / 1.286$ | 6 | DPST | 206-216 | 206-216ST |  |
| 9.80/. 386 | 1 | 3PST | 206-311 |  |  |
| 17.42 / . 686 | 2 | 3PST | 206-312 | $206-312 \mathrm{ST}$ |  |
| $25.04 / .986$ | 3 | 3PST | 206-313 | 206-313ST |  |
| 32.66 / 1.286 | 4 | 3PST | 206-314 | 206-314ST |  |

## Mouser Electronics

Authorized Distributor

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## CTS:

206-10LPST 206-121 206-121RAST 206-122 206-122RAST 206-122ST 206-123 206-123RAST 206-123ST
206-124RAST 206-124ST 206-125 206-125RAST 206-125ST 206-126 206-126RAST 206-12LPST 206-211 206-
211RAST 206-211ST 206-212 206-212RAST 206-212ST 206-213 206-213RAST 206-213ST 206-214ST 206-215
206-215RAST 206-215ST 206-216 206-216RAST 206-216ST 206-2LPST 206-3LPST 206-4LPST 206-5LPST
206-6LPST 206-7LPST 206-8LPST 206-9LPST 208-10 208-10ST 208-12ST 208-2ST 208-3ST 208-4ST 208-
5ST 208-6ST 208-7ST 208-8ST 208-9ST 206-2 206-2S 206-2RAS 206-2RA 206-2E 206-2ES 206-3S 206-
3RAS 206-3RA 206-3E 206-3ES 206-4S 206-4RAS 206-4RA 206-4E 206-4ES 206-5 206-5S 206-5RAS 2065RA 206-5E 206-5ES 206-6S 206-6ST 206-6RAS 206-6RA 206-6E 206-6ES 206-7 206-7S 206-7RAS 2067RA 206-7E 206-7ES 206-8S 206-8RAS 206-8RA 206-8E 206-8ES 206-9 206-9S 206-9RAS 206-9RA 206-9E 206-9ES 206-10S 206-10RAS 206-10RA


[^0]:    2. Not available in a Double Pole Double Throw (DPDT) construction
