## 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:

206-123RAST 206-12LPST 206-216RAST 206-2S 206-2RAS 206-2E 206-2ES 206-3S 206-3RAS 206-3E 2063ES 206-4S 206-4RAS 206-4E 206-4ES 206-5S 206-5RAS 206-5E 206-5ES 206-6S 206-6RAS 206-6E 206-
6ES 206-7S 206-7RAS 206-7E 206-7ES 206-8S 206-8RAS 206-8E 206-8ES 206-9S 206-9RAS 206-9E 206-
9ES 206-10S 206-10RAS 206-10RA 206-10E 206-10ES 206-12S 206-12RAS 206-12E 206-12ES 206-121S
206-121RAS 206-122S 206-122RAS 206-123S 206-123RAS 206-123RA 206-124S 206-124RAS 206-125S 206125RAS 206-125RA 206-126S 206-126RAS 206-126RA 206-211S 206-211RAS 206-212S 206-212RAS 206213S 206-213RAS 206-213RA 206-214S 206-214RAS 206-214RA 206-215S 206-215RAS 206-215RA 206-216S 206-216RAS 206-216RA 206-312S 206-312RAST 206-312RAS 206-312RA 208-2S 208-3S 208-4S 208-5S 208-6S 208-7S 208-8S 208-9S 208-10S 208-12S 206S0117 206-4STP 206-12LPSN 206-8STN 206-311ST 208-1S 206-8LPSTP 206-12LPS


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