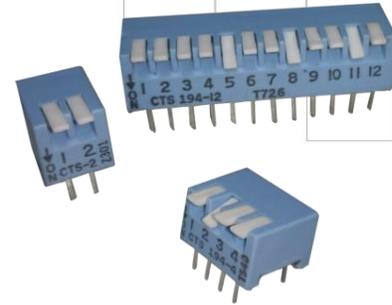




Series 194

Side Actuated, Through-Hole DIP Switch

- Contact wiping action on make and break
- Enclosed actuators shield contacts from foreign particles throughout life of switch
- Series 194 – gold plated contacts for long-term contact corrosion resistance and with blue housing
- RoHS compliant
- Optional top tape seal for board spray washing



Ordering Information

Series	Number of Actuator	Switch Positions Height	Bottom Seal	Top Tape Seal	Shipping Position																																					
194-	XX	M	S	T	N																																					
	<table border="1"> <thead> <tr> <th>Code</th> <th>No. of switch positions</th> </tr> </thead> <tbody> <tr><td>2</td><td>2 positions</td></tr> <tr><td>3</td><td>3 positions</td></tr> <tr><td>4</td><td>4 positions</td></tr> <tr><td>5</td><td>5 positions</td></tr> <tr><td>6</td><td>6 positions</td></tr> <tr><td>7</td><td>7 positions</td></tr> <tr><td>8</td><td>8 positions</td></tr> <tr><td>9</td><td>9 positions</td></tr> <tr><td>10</td><td>10 positions</td></tr> <tr><td>12</td><td>12 positions</td></tr> </tbody> </table>	Code	No. of switch positions	2	2 positions	3	3 positions	4	4 positions	5	5 positions	6	6 positions	7	7 positions	8	8 positions	9	9 positions	10	10 positions	12	12 positions	<table border="1"> <thead> <tr> <th>Code</th> <th>Spec.</th> </tr> </thead> <tbody> <tr><td>M</td><td>Medium actuator (1.14mm/.045")</td></tr> </tbody> </table>	Code	Spec.	M	Medium actuator (1.14mm/.045")	<table border="1"> <thead> <tr> <th>Code</th> <th>Top tape seal</th> </tr> </thead> <tbody> <tr><td>Blank</td><td>No top tape seal</td></tr> <tr><td>T</td><td>Top tape seal</td></tr> </tbody> </table>	Code	Top tape seal	Blank	No top tape seal	T	Top tape seal	<table border="1"> <thead> <tr> <th>Code</th> <th>Spec.</th> </tr> </thead> <tbody> <tr><td>BLANK</td><td>Ship at OFF position</td></tr> <tr><td>N</td><td>Ship at ON position</td></tr> </tbody> </table>	Code	Spec.	BLANK	Ship at OFF position	N	Ship at ON position
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Notes: Contact CTS for other common features not listed.



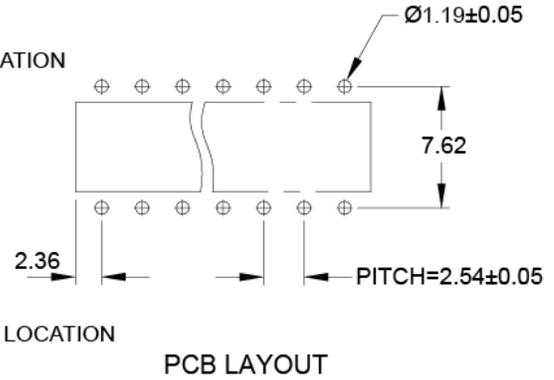
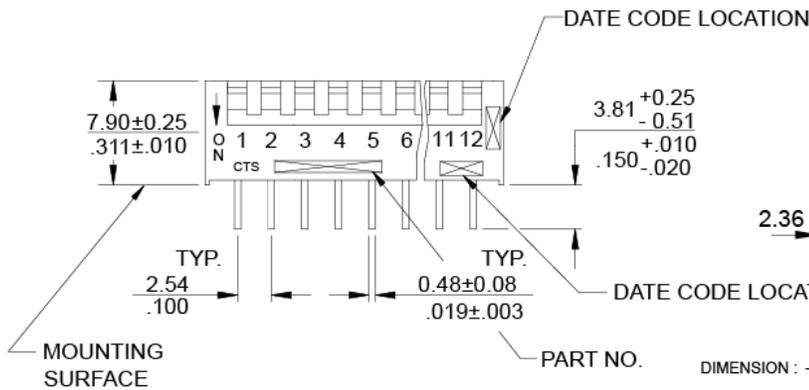
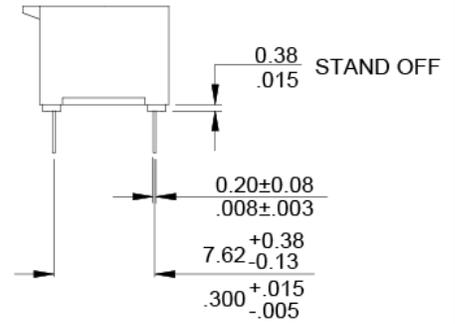
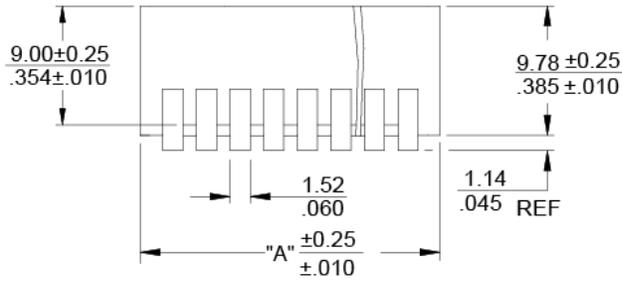
Electrical Specifications

Parameter	Conditions & Remarks	Min	Max	Unit
Circuit	SPST	2	12	position
Contact Resistance	Initial At end of life		50 100	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			100 or 50	mA or VDC

Mechanical and Environmental

Actuation Life	7000 cycles switching at 50mA and 24 VDC
Soldering	Maximum wave temperature, 260°C for 5 seconds
MSL	Level 1
RoHS	Lead-Free. Fully compliant to RoHS Directive 2011/65/EU
Shock	Per MIL-STD-202F, method 213B, condition A(50G's) with no contact inconsistencies greater than 1 microsecond
Vibration	Per MIL-STD-202F, method 204D, condition B (.06" or 15G's between 10 HZ to 2K HZ) with no contact inconsistencies greater than 1 microsecond
Seal	Bottom seal standard Top tape seal optional
Marking	Special side marking available-consult CTS
Packaging:	Standard anti-static tube packaging
Operating Temperature Range	-40°C to +85°C
Storage Temperature Range	-40°C to +85°C

Mechanical Specifications



DIMENSION : $\frac{\text{mm}}{\text{inch}}$
 STANDARD TOLERANCE :
 .X (1 PLACE) : $\frac{\pm 0.3}{\pm 0.012}$.XX(2 PLACE) : $\frac{\pm 0.13}{\pm 0.005}$

"A" Overall Dimensions	No. of Switch Positions	Part Number
7.26 / .286	2	194-2MS
9.80 / .386	3	194-3MS
12.34 / .486	4	194-4MS
14.88 / .586	5	194-5MS
17.42 / .686	6	194-6MS
19.96 / .786	7	194-7MS
22.50 / .886	8	194-8MS
25.04 / .986	9	194-9MS
27.58 / 1.086	10	194-10MS
32.66 / 1.286	12	194-12MS