

Side Actuated, Through Hole DIP Switches

Features

Optimized Mechanical Features

- Enclosed actuators shield contacts from foreign particles throughout life of switch
- Standard 2.54mm (.100") x 7.62mm (.300") DIP centers

Optimized Contact System

- Contact wiping action on make and break
- Integral terminal and contact locked into high temperature plastic base
- Lock-over-center design provides positive detent action
- Optimized, active contact design incorporating a dimple-to-flat surface wiping interface with high contact force

Materials

- Series 194 - gold plated contacts for long-term contact corrosion resistance
- Series 195 - tin plated contacts
- Tin plated terminals for better solderability
- UL 94V-0 plastics
- RoHS compliant
- Optional top tape seal for board spray washing



Series 194 – Premium Gold Plated Contacts
Series 195 – Economical Tin Plated Contacts

Electrical and Mechanical Specifications

Switch Function

SPST-2 through 10 and 12 positions

Switch Contact Resistance

Switch Series	Initial, max.	End of life, max.
194	50 milliohms	100 milliohms
195	100 milliohms	500 milliohms

Insulation Resistance

1,000 megohms minimum between insulated terminals

Dielectric Strength

500 VAC for 1 minute between adjacent switches

Nonswitching Rating

100 mA or 50 VDC maximum

Switch Capacitance

5.0 pF maximum between adjacent closed switches

Operating Temperature

-40°C to +85°C

Actuation Life

Series 194 – 7,000 cycles switching 50 mA @ 24 VDC

Series 195 – 2,000 cycles switching 50 mA @ 24 VDC

Allowable Solder Time

Wave soldering up to 5 seconds at 260°C

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

Shock

Per MIL-STD-202F, method 213B, condition A (25G'S) with no contact inconsistencies greater than 1 microsecond

Sealing

Bottom epoxy seal standard

Optional top tape seal for board spray washing

Marking

Special side or top marking available-consult CTS

Packaging

Standard : Anti-static tube packaging

CTS SERIES 194/195



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

"A" Overall Dimensions	No. of Switch Positions	Part Number
7.26 / .286	2	194/195-2MS
9.80 / .386	3	194/195-3MS
12.34 / .486	4	194/195-4MS
14.88 / .586	5	194/195-5MS
17.42 / .686	6	194/195-6MS
19.96 / .786	7	194/195-7MS
22.50 / .886	8	194/195-8MS
25.04 / .986	9	194/195-9MS
27.58 / 1.086	10	194/195-10MS
32.66 / 1.286	12	194/195-12MS

Ordering Information

194/195 - 10 M S T N

XX: # OF POSITIONS

M: MEDIUM HEIGHT ACTUATOR
(1.14mm/.045")

S: BOTTOM EPOXY SEAL

T: TOP TAPE SEAL
(Ship at ON position only)

BLANK: SHIP AT OFF POSITION
N: SHIP AT ON POSITION

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