

# Series 194/195 DIP Technical Data

# Side Actuated, Through Hole DIP Switches

#### **Features**

#### **Optimized Mechanical Features**

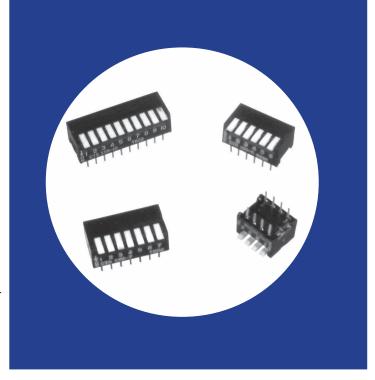
- Enclosed actuators shield contacts from foreign particles throughout life of switch
- Standard 2.54mm (.100") x 7.62mm (.300") DIP centers

#### **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 dimpleto-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
- · All UL 94V-0 plastics used
- · RoHS compliant



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 millohms
195	100 milliohms	500 millohms

#### **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 Top tape seal optional

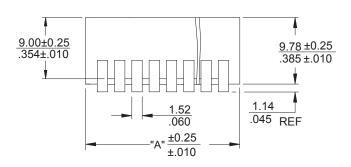
#### Marking

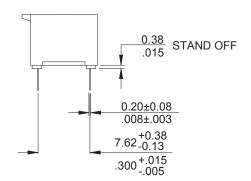
Special side or top marking available-consult CTS

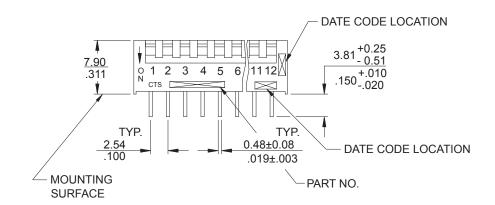
#### **Packaging**

Standard: Anti-static tube packaging

#### **CTS SERIES 194/195**







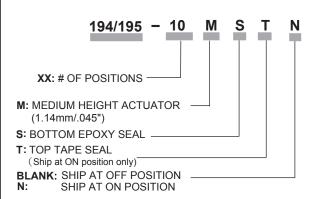
 ${\color{red} {\sf DIMENSION:}} \ \frac{{\color{blue} {\sf mm}}}{{\color{blue} {\sf inch}}}$ 

"A' Over		No. of Switch	
Dimen			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

12

194/195-12MS

## **Ordering Information**



32.66 / 1.286