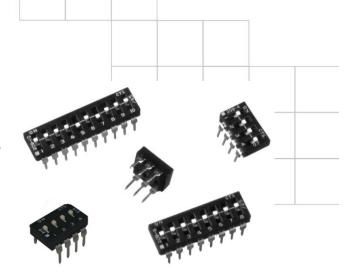


# Series 209/210 Through-Hole DIP Switch

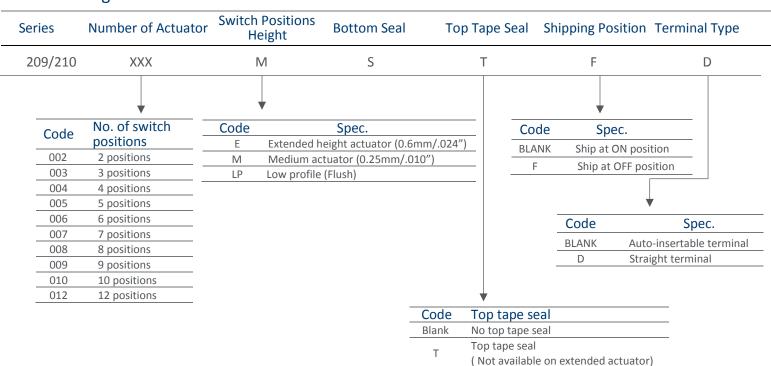
- Available with low profile, medium, and extended height actuators
- Series 209 premium gold plated beryllium copper contacts
- Series 210 economical gold flash beryllium copper contacts
- Low profile body
- RoHS compliant
- Optional top tape seal for board spray washing



#### Description

These versatile, low profile switches, are available with auto-insertable or hand-insertable terminal styles. The switches feature a positive detent feature separate from the contactor so it does not deflect during actuation. The molded body paired with the optional top tape seal provides optimum protection during soldering processes that includes board spray washing. This versatile switch is an ideal choice for most SPST applications.

## **Ordering Information**



Notes: Contact CTS for other common features not listed.



**Electrical Specifications** 

Parameter	Conditions & Remarks	Min	Max	Unit
Operating Temperature		-40	LOE	°C
Range		-40	+85	

## **Switch Function**

Circuit	SPST	2	12	positions
Contact Resistance (209)	Initial		25	milliohms
	At end of life		50	
Contact Resistance (210)	Initial		100	milliohms
	At end of life		500	
Insulation Resistance	Between insulated terminals	1000		megohms
Dielectric Strength	500 VAC between adjacent		1	minute
	switches		1	
Actuation Life (209)	100mA @ 20 VDC or		2,000	ovelos.
	.1mA @ 5 VDC(dry circuit)			cycles
Actuation Life (210B)	100mA @ 20 VDC or		1,000	cycles
	.1mA@5 VDC(dry circuit)			
Switch Capacitance	Between adjacent closed		5.0	pF
	switches			
Non-switching Rating			100	mA
			or	or
			50	VDC

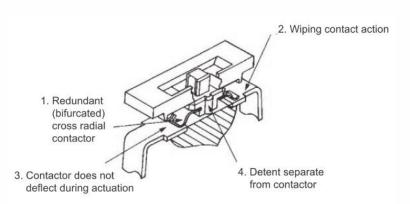
## Mechanical and Environmental

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, optional top tape seal for board spray washing	
Marking	Special top marking available-consult CTS	
Packaging:	Standard anti-static tube packaging	
Storage Temperature	-40°C to +85°C	
Range	-40 C (0 +65 C	



## **Mechanical Specifications**

## Series 209 / 210 Contact Features



- Value of Redundant (Bifurcated)
   Contacts: Redundancy
   dramatically reduces the probability of
   contact failure, IMPROVING
   RELIABILITY.
- 2. Value of Wiping Contact Action: Clean contact area, IMPROVING RELIABILITY.
- Value of Contactor Not Deflecting During Actuation: Constant contact pressure eliminates overstressing contacts, IMPROVING RELIABILITY.
- 4. Value of Detent Separate from Contactor: Separate detent allows optimization of nondeflecting contactor and detent designs, IMPROVING RELIABILITY.

