

# Miniature Toggle Switches

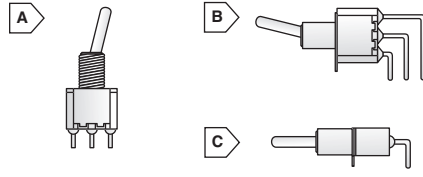
## E-SWITCH™ MINIATURE TOGGLE SWITCHES, 100 AND 100A SERIES

### Specifications for 100 and 100A Series:

- Contact resistance: 10mΩ max. initial @ 2-4VDC 100mA for both silver and gold plated contacts.
- Insulation resistance: 1,000MΩ min.
- Dielectric strength: 1,000Vrms @ sea level
- Operating temperature: -30°C to 85°C

### Contact Material Options:

- **Q** - Fixed terminal and moving contact: silver plated over copper alloy  
Contact rating: 5A with resistive load @ 120VAC or 28VDC, 2A with resistive load @ 250VAC
- **R** - Fixed terminal and moving contact: copper alloy with gold plate over nickel plate  
Contact rating: 0.4VA max. @ 20V max. (AC or DC)



MOUSER STOCK NO.	E-Switch Part No.	Fig.	Type	Circuit	Options			Contact Material Options	Price Each			
					Actuator	Bush.	Term.		1	10	50	100
<b>100 Series - Metal Bushing</b>												
612-100-A1421	100SP1T1B4M2QE	A	SPDT	On-On	T1	B4	M2	Q	2.44	2.20	1.87	1.53
612-100-A2111	100SP1T2B1M1QE	A	SPDT	On-On	T2	B1	M1	Q	2.44	2.20	1.87	1.53
612-100-A1112	100SP1T1B1M1RE	A	SPDT	On-On	T1	B1	M1	R	2.66	2.39	2.03	1.67
612-100-A1122	100SP1T1B1M2RE	A	SPDT	On-On	T1	B1	M2	R	5.45	4.90	4.17	3.27
612-100-A2472	100SP1T2B4M7RE	B	SPDT	On-On	T2	B4	M7	R	3.80	3.42	2.91	2.38
612-100-A6461	100SP1T6B12M6RE	C	SPDT	On-On	T6	B12	M6	R	4.44	4.00	3.40	2.78
612-100-A1482	100SP1T1B4VS2RE	A	SPDT	On-On	T1	B4	VS2	R	3.58	3.22	2.74	2.23
612-100-C1112	100SP3T1B1M1RE	A	SPDT	On-Off-On	T1	B1	M1	R	2.96	2.67	2.27	1.85
612-100-C1462	100SP3T1B4M6RE	C	SPDT	On-Off-On	T1	B4	M6	R	3.85	3.46	2.95	2.41
612-100-D1111	100SP4T1B1M1QE	A	SPDT	(On)-Off-(On)	T1	B1	M1	Q	6.06	5.46	4.65	3.63
612-100-D1121	100SP4T1B1M2QE	A	SPDT	(On)-Off-(On)	T1	B1	M2	Q	3.12	2.80	2.39	2.00
612-100-D6121	100SP4T6B11M2QE	A	SPDT	(On)-Off-(On)	T6	B11	M2	Q	4.01	3.61	3.07	2.41
612-100-E1111	100SP5T1B1M1QE	A	SPDT	On-Off-(On)	T1	B1	M1	Q	3.30	2.97	2.53	2.07
612-100-E2462	100SP5T2B4M6RE	C	SPDT	On-Off-(On)	T2	B4	M6	R	4.40	3.96	3.38	2.76
612-100-L1111	100DP6T1B1M1QE	A	DPDT	On-On-On	T1	B1	M1	Q	4.92	4.43	3.77	3.08
612-100-F1111	100DP1T1B1M1QE	A	DPDT	On-On	T1	B11	M1	Q	6.35	5.71	4.87	3.81
612-100-F1112	100DP1T1B1M1RE	A	DPDT	On-On	T1	B11	M1	R	3.61	3.25	2.76	2.26
612-100-F1122	100DP1T1B1M2RE	A	DPDT	On-On	T1	B1	M2	R	3.61	3.25	2.76	2.26
<b>100A Series - Sealed (Plastic Bushing)</b>												
612-100A-A1422	100AWSP1T1B4M2R	A	SPDT	On-On	T1	B4	M2	R	3.57	3.21	2.74	2.14
612-100A-A2462	100AWSP1T2B4M6R	C	SPDT	On-On	T2	B4	M6	R	4.77	4.29	3.65	2.86
612-100A-C1422	100AWSP3T1B4M2R	A	SPDT	On-Off-On	T1	B4	M2	R	6.34	5.71	4.86	3.81
612-100A-C2472	100AWSP3T2B4M7R	B	SPDT	On-Off-On	T2	B4	M7	R	5.41	4.87	4.15	3.25
612-100A-D1422	100AWSP4T1B4M2R	A	SPDT	(On)-Off-(On)	T1	B4	M2	R	4.37	3.93	3.35	2.62
612-100A-D2412	100AWSP4T2B4M1R	A	SPDT	(On)-Off-(On)	T2	B4	M1	R	5.61	5.05	4.30	3.37
612-100A-D2462	100AWSP4T2B4M6R	C	SPDT	(On)-Off-(On)	T2	B4	M6	R	5.57	5.02	4.27	3.34
612-100A-D2472	100AWSP4T2B4M7R	B	SPDT	(On)-Off-(On)	T2	B4	M7	R	5.88	5.30	4.51	3.53

DIMENSIONS: mm								
Actuator Options								
T1			T2			T6		
Series	D	L	Series	D	L	Series	D	L
100	2.9	10.4	100	2.7	5.1			
100A	2.9	10.4	100A	2.7	5.1			
200	2.54	9.4	200	2.54	5.3			
200A	2.54	10.2	200A	2.54	6.1			

Bushing Options								
B1			B2			B3		
Series	NS	H	Series	NS	H	Series	NS	H
100	1/4-40	8.9	100	1/4-40	8.9	100	1/4-40	8.9
200	10-48	5.6	200	10-48	5.6	200	10-48	5.6

B4			B11			A1		
Series	H		Series	H		Series	H	
100	7.1		100	7.5		100	4.6	
100A	6.4		100A	7.1		100A	4.5	

Termination Options								
M1			M2			VS2		
Series	H		Series	H		Series	H	
100&100A	4.0		100&100A	4.8		100&100A	4.7	
200&200A	4.1		200&200A	3.3		200&200A	4.7	

M6			M7		
Series	H		Series	H	
100&100A	12.7		100&100A	12.7	
200&200A	3.2		200&200A	3.3	

M7			M8		
Series	H		Series	H	
100&100A	12.7		100&100A	12.7	
200&200A	3.2		200&200A	3.3	

Toggle Switches

## E-SWITCH™ SUB-MINIATURE TOGGLE SWITCHES, 200 AND 200A SERIES

### Specifications for 200 and 200A Series:

- Contact resistance: 20mΩ max. initial @ 2-4VDC 100mA for both silver and gold plated contacts.
- Insulation resistance: 1,000MΩ min.
- Dielectric strength: 1,000Vrms @ sea level
- Operating temperature: -30°C to 85°C

### Contact Material Options:

- **Q** - Fixed terminal and moving contact: silver plated over copper alloy  
Contact rating: 5A with resistive load @ 120VAC or 28VDC, 2A with resistive load @ 250VAC
- **R** - Fixed terminal and moving contact: copper alloy with gold plate over nickel plate  
Contact rating: 0.4VA max. @ 20V max. (AC or DC)

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Type	Circuit	Options			Contact Material Options	Price Each			
					Actuator	Bush.	Term.		1	10	50	100
<b>200 Series</b>												
612-200-A1111	200MSP1T1B1M1QE	A	SPDT	On-On	T1	B1	M1	Q	4.61	4.16	3.54	2.77
612-200-A1121	200MSP1T1B1M2QE	A	SPDT	On-On	T1	B1	M2	Q	2.57	2.32	1.98	1.54
612-200-A2272	200MSP1T2B2M7RE	B	SPDT	On-On	T2	B2	M7	R	4.12	3.71	3.15	2.47
612-200-C1111	200MSP3T1B1M1QE	A	SPDT	On-Off-On	T1	B1	M1	Q	3.46	3.12	2.66	2.08
612-200-C1121	200MSP3T1B1M2QE	A	SPDT	On-Off-On	T1	B1	M2	Q	3.46	3.12	2.66	2.08
612-200-C2262	200MSP3T2B2M6RE	C	SPDT	On-Off-On	T2	B2	M6	R	4.62	4.16	3.54	2.77
<b>200A Series-Sealed</b>												
612-200A-A2182	200AWMSP1T2A1VS2R	A	SPDT	On-On	T2	A1	VS2	R	4.10	3.69	3.15	2.46
612-200A-A2162	200AWMSP1T2A1M6R	C	SPDT	On-On	T2	A1	M6	R	3.91	3.51	3.00	2.35

## ELECTROSWITCH MINIATURE TOGGLE SWITCHES



### Materials:

- Base (body): 1- and 2-pole - Diallyl Phthalate (DAP)  
3- and 4-pole - high strength phenolic
- Bushing: Brass, nickel plated
- Switching Contacts: Coin silver
- Center Terminal: Silver plated brass

### Power Rating:

- 6A @ 125 VAC
- 3A @ 250 VAC

MOUSER STOCK NO.	Electroswitch Part No.	Fig.	Type	Circuit	Price Each			
					1	25	50	100
690-A121S1YZQ	A121S1YZQ	A	SPDT	On-Off-On	7.85	7.42	6.54	5.71
690-A123S1YZQ	A123S1YZQ	A	SPDT	On-None-On	6.18	5.85	5.16	4.50
690-A126S1YZQ	A126S1YZQ	A	SPDT	On-None-(On)	10.56	9.97	8.80	7.68
690-A127S1YZQ	A127S1YZQ	A	SPDT	(On)-Off-(On)	7.93	7.49	6.61	5.76
690-A131S1YZQ	A131S1YZQ	A	SPDT	On-Off-(On)	7.93	7.49	6.61	5.76
690-A221S1YZQ	A221S1YZQ	B	DPDT	On-Off-On	9.84	9.29	8.21	7.16
690-A223S1YZQ	A223S1YZQ	B	DPDT	On-None-On	8.13	7.69	6.78	5.91
690-A226S1YZQ	A226S1YZQ	B	DPDT	On-None-(On)	13.59	12.83	11.34	9.90
690-A227S1YZQ	A227S1YZQ	B	DPDT	(On)-Off-(On)	11.67	11.03	9.74	8.50
690-A232S1YZQ	A232S1YZQ	B	DPDT	On-On-On	11.09	10.47	9.23	8.07
690-A321S1YZQ	A321S1YZQ	C	3PDT	On-Off-On	21.75	20.53	18.11	15.82
690-A323S1YZQ	A323S1YZQ	C	3PDT	On-None-On	18.90	17.85	15.74	13.75
690-A327S1YZQ	A327S1YZQ	C	3PDT	(On)-Off-(On)	21.65	20.45	18.04	15.75
690-A421S1YZQ	A421S1YZQ	D	4PDT	On-Off-On	20.08	18.95	16.73	14.60
690-A423S1YZQ	A423S1YZQ	D	4PDT	On-None-On	20.61	19.47	17.17	14.99

DIMENSIONS: in.			
A	B	C	D