

# Miniature Toggle Switches

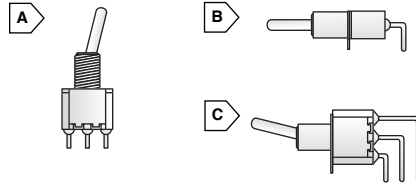
## E-SWITCH® MINIATURE TOGGLE SWITCHES, 100 AND 100A SERIES

### 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	3.42	3.08	2.62	2.05
612-100-A2111	100SP1T2B1M1QE	A	SPDT	On-On	T2	B1	M1	Q	3.42	3.08	2.62	2.05
612-100-A1112	100SP1T1B1M1QE	A	SPDT	On-On	T1	B1	M1	Q	3.72	3.35	2.85	2.23
612-100-A1122	100SP1T1B1M2RE	A	SPDT	On-On	T1	B1	M2	R	3.81	3.43	2.92	2.29
612-100-A2472	100SP1T2B4M7RE	C	SPDT	On-On	T2	B4	M7	R	5.31	4.78	4.07	3.19
612-100-A6461	100SP1T6B12M6RE	B	SPDT	On-On	T6	B12	M6	R	6.21	5.59	4.76	3.73
612-100-A1482	100SP1T1B4VS2RE	A	SPDT	On-On	T1	B4	VS2	R	4.98	4.48	3.82	2.99
612-100-C1112	100SP3T1B1M1RE	A	SPDT	On-Off-On	T1	B1	M1	R	4.14	3.73	3.17	2.48
612-100-C1462	100SP3T1B4M6RE	B	SPDT	On-Off-On	T1	B4	M6	R	5.37	4.83	4.12	3.22
612-100-D1111	100SP4T1B1M1QE	A	SPDT	(On)-Off-(On)	T1	B1	M1	Q	4.35	3.92	3.34	2.61
612-100-D1121	100SP4T1B1M2QE	A	SPDT	(On)-Off-(On)	T1	B1	M2	Q	4.47	4.02	3.43	2.68
612-100-D6121	100SP4T6B11M2QE	A	SPDT	(On)-Off-(On)	T6	B11	M2	Q	5.61	5.05	4.30	3.37
612-100-E1111	100SP5T1B1M1QE	A	SPDT	On-Off-(On)	T1	B1	M1	Q	4.62	4.16	3.54	2.77
612-100-E2462	100SP5T2B4M6RE	B	SPDT	On-Off-(On)	T2	B4	M6	R	6.15	5.54	4.72	3.69
612-100-L1111	100DP6T1B1M1QE	A	DPDT	On-On-On	T1	B1	M1	Q	6.87	6.18	5.27	4.12
612-100-F1111	100DP1T1B1M1QE	A	DPDT	On-On	T1	B11	M1	Q	4.56	4.10	3.50	2.74
612-100-F1122	100DP1T1B1M1RE	A	DPDT	On-On	T1	B11	M1	R	5.04	4.54	3.86	3.02
612-100-F1122	100DP1T1B1M2RE	A	DPDT	On-On	T1	B1	M2	R	5.04	4.54	3.86	3.02
<b>100A Series - Sealed (Plastic Bushing)</b>												
612-100A-A1422	100AWSP1T1B4M2R	A	SPDT	On-On	T1	B4	M2	R	4.56	4.10	3.50	2.74
612-100A-A2462	100AWSP1T2B4M6R	B	SPDT	On-On	T2	B4	M6	R	6.12	5.51	4.69	3.67
612-100A-C1422	100AWSP3T1B4M2R	A	SPDT	On-Off-On	T1	B4	M2	R	4.98	4.48	3.82	2.99
612-100A-C2472	100AWSP3T2B4M7R	C	SPDT	On-Off-On	T2	B4	M7	R	6.93	6.24	5.31	4.16
612-100A-D1422	100AWSP4T1B4M2R	A	SPDT	(On)-Off-(On)	T1	B4	M2	R	5.61	5.05	4.30	3.37
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	B	SPDT	(On)-Off-(On)	T2	B4	M6	R	7.14	6.43	5.47	4.28
612-100A-D2472	100AWSP4T2B4M7R	C	SPDT	(On)-Off-(On)	T2	B4	M7	R	7.53	6.78	5.77	4.52

## 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	3.45	3.11	2.65	2.07
612-200-A1121	200MSP1T1B1M2QE	A	SPDT	On-On	T1	B1	M2	Q	3.45	3.11	2.65	2.07
612-200-A2272	200MSP1T2B2M7RE	C	SPDT	On-On	T2	B2	M7	R	5.52	4.97	4.23	3.31
612-200-C1111	200MSP3T1B1M1QE	A	SPDT	On-Off-On	T1	B1	M1	Q	4.65	4.19	3.57	2.79
612-200-C1121	200MSP3T1B1M2QE	A	SPDT	On-Off-On	T1	B1	M2	Q	4.65	4.19	3.57	2.79
612-200-C2262	200MSP3T2B2M6RE	B	SPDT	On-Off-On	T2	B2	M6	R	6.21	5.59	4.77	3.73
<b>200A Series-Sealed</b>												
612-200A-A2182	200AWMSP1T2A1VS2R	A	SPDT	On-On	T2	A1	VS2	R	4.56	4.10	3.50	2.74
612-200A-C1122	200AWMSP2T1A1M2R	A	SPDT	On-(On)	T1	A1	M2	R	5.08	4.67	3.81	3.05
612-200A-A2162	200AWMSP1T2A1M6R	B	SPDT	On-On	T2	A1	M6	R	4.56	4.10	3.50	2.74
612-200A-C2162	200AWMSP2T2A1M6R	B	SPDT	On-(On)	T2	A1	M6	R	6.53	6.01	4.90	3.92

**DIMENSIONS: mm**

**Actuator Options**

T1

Series	D	L
100	2.9	10.4
100A	2.9	10.4
200	2.54	9.4
200A	2.54	10.2

T2

Series	D	L
100	2.7	5.1
100A	2.7	5.1
200	2.54	5.3
200A	2.54	6.1

T6

Series	D	L
100	2.7	5.1
100A	2.7	5.1
200	2.54	5.3
200A	2.54	6.1

**Bushing Options**

B1

Series	NS	H
100	1/4-40	8.9
200	10-48	5.6

B2

Series	H
100	7.1
100A	6.4

B3

Series	H
100	7.1
100A	6.4

B4

Series	H
100	7.1
100A	6.4

B11

Series	H
100	7.1
100A	6.4

A1

Series	H
100	7.1
100A	6.4

**Termination Options**

M1

Series	H
100&100A	4.0
200&200A	4.1

M2

Series	H
100&100A	4.8
200&200A	3.3

VS2

Series	H
100&100A	4.7
200&200A	4.7

M6

Series	H
100&100A	6.9
200&200A	3.2

M7

Series	H
100&100A	12.7
200&200A	3.2

Toggle Switches

## ELECTROSWITCH MINIATURE TOGGLE SWITCHES



( ) Momentary For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Electroswitch Part No.	Fig.	Type	Circuit	Price Each			
					1	25	50	100
690-A121S1YZQ	A121S1YZQ	A	SPDT	On-Off-On	5.94	5.61	4.95	4.32
690-A123S1YZQ	A123S1YZQ	A	SPDT	On-None-On	5.40	5.10	4.50	3.93
690-A126S1YZQ	A126S1YZQ	A	SPDT	On-None-(On)	5.94	5.61	4.95	4.32
690-A127S1YZQ	A127S1YZQ	A	SPDT	(On)-Off-(On)	5.94	5.61	4.95	4.32
690-A131S1YZQ	A131S1YZQ	A	SPDT	On-Off-(On)	5.94	5.61	4.95	4.32
690-A221S1YZQ	A221S1YZQ	B	DPDT	On-Off-On	8.28	7.82	6.90	6.03
690-A223S1YZQ	A223S1YZQ	B	DPDT	On-None-On	7.38	6.97	6.15	5.37
690-A226S1YZQ	A226S1YZQ	B	DPDT	On-None-(On)	8.28	7.82	6.90	6.03
690-A227S1YZQ	A227S1YZQ	B	DPDT	(On)-Off-(On)	8.28	7.82	6.90	6.03
690-A232S1YZQ	A232S1YZQ	B	DPDT	On-On-On	9.00	8.50	7.50	6.55
690-A321S1YZQ	A321S1YZQ	C	3PDT	On-Off-On	13.68	12.92	11.40	9.96
690-A323S1YZQ	A323S1YZQ	C	3PDT	On-None-On	12.60	11.90	10.50	9.17
690-A327S1YZQ	A327S1YZQ	C	3PDT	(On)-Off-(On)	16.38	15.47	13.65	11.92
690-A421S1YZQ	A421S1YZQ	D	4PDT	On-Off-On	18.36	17.34	15.30	13.36
690-A423S1YZQ	A423S1YZQ	D	4PDT	On-None-On	17.10	16.15	14.25	12.45

### 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

**DIMENSIONS: in.**

A

Series	H
100	4.10
100A	3.52
200	3.50
200A	3.50

B

Series	H
100	4.10
100A	3.52
200	3.50
200A	3.50

C

Series	H
100	4.10
100A	3.52
200	3.50
200A	3.50

D

Series	H
100	4.10
100A	3.52
200	3.50
200A	3.50