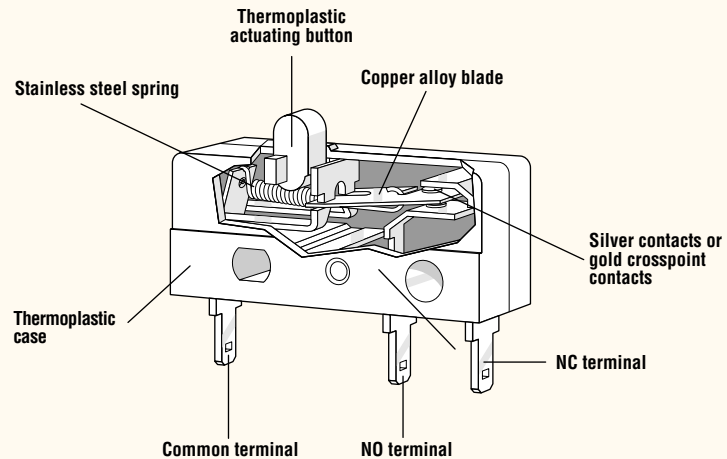


# SUBMINIATURE E Series

## Features

- 4 current ratings
- Choice of actuator
- 5 terminal types
- 3 contact arrangements
- Long life coil spring mechanism
- DC ratings available upon request
- High-temperature version available

Subminiature modules take less space than individual subminiature switches fastened side-by-side. For applications requiring 2, 3, 4 or 5-circuit control in a compact space, the special molded case design helps speed assembly since there is only one part to handle and install rather than 2, 3, 4 or 5 individual switches.



## Electrical Ratings

Switch Series	EN61058 Rating	UL1054 Rating	Electrical Life at Rated Load	
			According to VDE (Min. Operations)	According to UL (Min. Operations)
E61	N/A	5A, 125/250VAC 5A, 30VDC (optional)	N/A	6,000*
E62	N/A	10.1A, 125/250VAC; 1/4HP, 125VAC	N/A	6,000
E63	N/A	0.1A, 125VAC 0.25A, 30VDC (optional)	N/A	6,000
E64	N/A	13A, 125VAC; 10.1A, 250VAC	N/A	6,000

\*Indicates 100K life available.

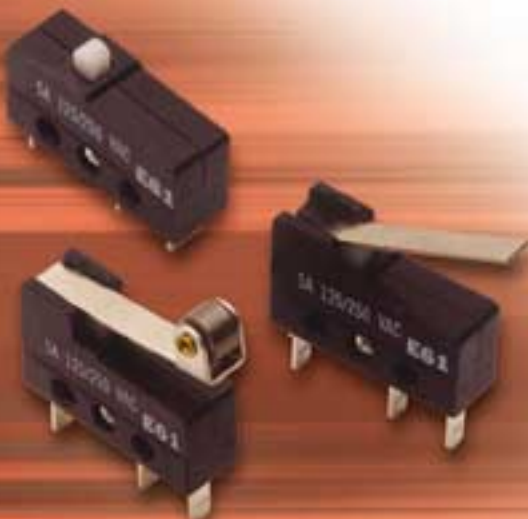
## Specifications

### Electrical

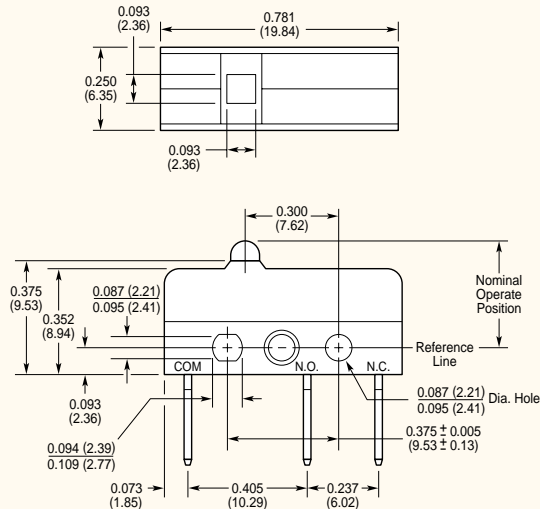
Temperature Rating:	-40° to +85°C, +130° optional using thermoset material
Flammability Rating:	UL94HB

### Materials

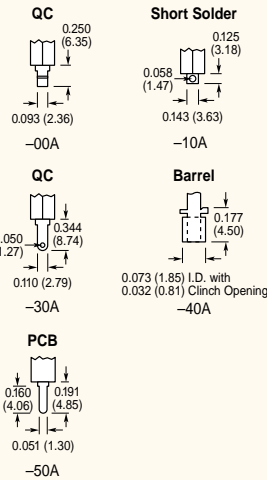
Case:	Thermoplastic
Actuating Button:	Thermoplastic Acetal
Terminals:	Silver-Plated Commercial Bronze
Moving Blade:	Beryllium Copper
Spring:	Stainless Steel
Auxiliary Actuator:	Cold Rolled Steel (Nickel-Plated)
Contacts:	Fine Silver (except E63 — Gold Crosspoint)



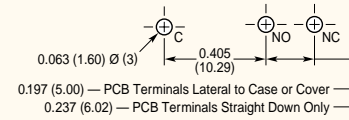
## Dimensions inches (mm)



## Terminals

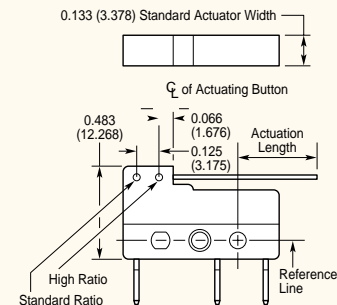


## PCB Footprint



## Actuators

Many special forms and lengths of actuators are available. Standard type integral hinged lever and roller actuators are available in choice of 2 pivot positions. Actuation lengths are dimensioned from centerline of switch mounting hole as shown.



## Actuator Specifications

Actuator Type	Switch Type	Maximum Operating Force (gms.)				Maximum Pre-Travel inches (mm)	Operating Point* inches (mm)	Minimum Over-Travel inches (mm)	Max. Movement Differential inches (mm)	Actuation Length** inches (mm)
		E61	E62	E63	E64					
-00A		90	212	90	335	0.030 (0.76)	0.330±0.015 (8.38±0.38)	0.040 (1.06)	0.004 (0.10)	—
-00R		30	65	30	110	0.130 (3.30)	0.574±0.054 (14.58±1.37)	0.030 (0.76)	0.020 (0.51)	0.196 (4.98)
-50R		10	22	10	40	0.379 (9.63)	0.570±0.156 (14.48±3.96)	0.050 (1.27)	0.050 (1.27)	0.322 (8.18)
-00H		27	56	27	100	0.144 (3.66)	0.350±0.030 (8.89±0.76)	0.040 (1.02)	0.020 (0.51)	0.271 (6.88)
-50H		9	20	9	35	0.416 (10.57)	0.350±0.175 (8.89±4.45)	0.050 (1.27)	0.050 (1.27)	0.396 (10.06)
-00K		30	65	30	110	0.131 (3.33)	0.570±0.030 (14.48±0.76)	0.030 (0.76)	0.020 (0.51)	0.203 (5.16)
-50K		10	33	10	40	0.379 (9.63)	0.570±0.158 (14.48±4.01)	0.040 (1.02)	0.050 (1.27)	0.326 (8.28)

\*Measured above reference line. Refer to dimensional drawing above. \*\*Actuator tolerance of ±0.031 inches (0.79mm).

## Circuitry

Contact arrangement available in choice of single pole double throw or single pole single throw, either normally open or normally closed. In general, normally open may be specified by changing suffix number from 00 to 01 and normally closed by changing suffix number to 02.

Example: E61-01A is normally open, and E61-02A is normally closed.

## Mounting

Recommended mounting screw: #2-56 round head. Recommended torque on screw: 2 inch lbs. max.

## Ordering Information

Select the current rating you need. Combine the corresponding Series/Prefix number with the appropriate suffix number for the switch type, circuitry and terminals you require. See additional note under terminals.

Example: To order the E61-50R with 0.110" (2.79mm) QC terminals, order an E61-80R.

Note: 0.093" (2.36mm) Quick Connect terminals are standard. To order solder terminals add 10 to suffix. To order 0.110" (2.79mm) QC terminals add 30 to suffix. For PCB terminals consult factory.

Example: The basic E61-00A becomes E61-30A for 0.110" (2.79mm) QC terminals. For PCB terminals consult factory for part numbers.

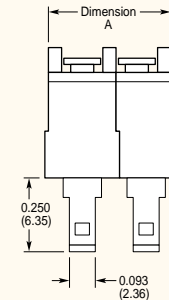
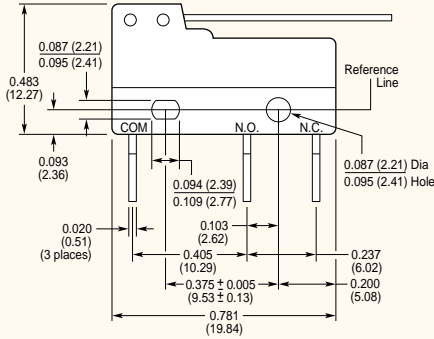
## Terminals

Subminiature series is available with quick connect. 0.093" (2.36mm) wide (mates with AMP Part No. 60432-1) and 0.110" (2.794mm) wide (mates with AMP Part No. 42068-1). Also available in short solder terminal 0.143" (3.63mm) wide x 0.125" (3.18mm) long, and PCB terminal 0.051" (1.30mm) wide x 0.191" (4.85mm) long.

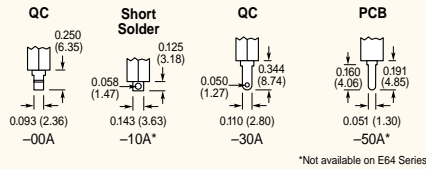
Terminal	SPDT	SPST NO	SPST NC
0.093" QC	E61-00A	E61-01A	E61-02A
Short Solder†	E61-10A	E61-11A	E61-12A
0.110" QC	E61-30A	E61-31A	E61-32A
Barrel†	E61-40A	E61-41A	E61-42A
PCB†	E61-50A	E61-51A	E61-52A

†Not available on E64 Series.

## Dimensions — Modules inches (mm)



Terminals



A Dimension

2 PDT	0.470±0.020 (11.934±0.51)
3 PDT	0.672±0.020 (17.07±0.51)
4 PDT	0.875±0.020 (22.23±0.51)
5 PDT	1.086±0.020 (27.58±0.51)

## Terminals — Modules

Subminiature modules are available with quick connect. 0.093" (2.362mm) wide (mates with AMP Part No. 60432-1) and 0.110" (2.794mm) wide (mates with AMP Part No. 42068-1). Also available in short solder terminal 0.143" (3.632mm) wide x 0.125" (3.175mm) long, and PCB terminal 0.051" (1.295mm) wide x 0.191" (4.851mm) long.

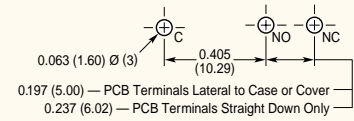
## Ordering Information — Modules

Select the current rating you need. Combine the corresponding Series/Prefix number with the appropriate suffix number for the switch type and terminals you require.

\*For additional actuator styles consult factory.

Switch Type	Terminal	Part Number Suffix			
		2PDT	3PDT	4PDT	5PDT
Standard Ratio	0.093" (2.362mm) QC	-02HM	-03HM	-04HM	-05HM
	Solder	-12HM	-13HM	-14HM	-15HM
	0.110" (2.794mm) QC	-32HM	-33HM	-34HM	-35HM
	PCB	Consult Factory			
High Ratio	0.093" (2.362mm) QC	-52HM	-53HM	-54HM	-55HM
	Solder	-62HM	-63HM	-64HM	-65HM
	0.110" (2.794mm) QC	-82HM	-83HM	-84HM	-85HM
	PCB	Consult Factory			

## PCB Footprint — Modules



## Actuators — Modules

Many special forms and lengths of actuators are available. Standard type integral hinged lever and roller actuators are available in choice of 2 pivot positions. Actuation lengths are dimensioned from centerline of switch mounting hole as shown.

