



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# SERIES MS SWITCHES

## SNAP ACTION SWITCHES - MINIATURE



### SPECIFICATIONS

Contact Rating:	Gold .4VA max. @ 20 VDC or VAC Max. 5 Amps @ 125/250 VAC-UL, CUL 5 (1) Amp, 250 VAC VDE
Life Expectancy:	50,000 cycles minimum
Mechanical Life:	1,000,000 cycles typical
Insulation Resistance:	100 MΩ min.
Dielectric Strength:	1,000 VAC for 60 seconds
Operating Temperature:	-25° C to 85° C (std)
Operating Force:	See Chart

### MATERIALS

Switch Housing:	High Temperature PBT (UL94 V-0)
Actuator Button:	High Temperature PBT (UL94 V-0)
Contacts:	Silver (std) or Gold
Terminals:	Copper Alloy

### FEATURES & BENEFITS

- ▶ Available in gold & 5 amp versions
- ▶ Wide variety of actuator, operating force & termination options

### APPLICATIONS/MARKETS

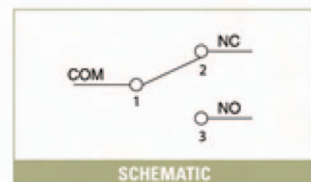
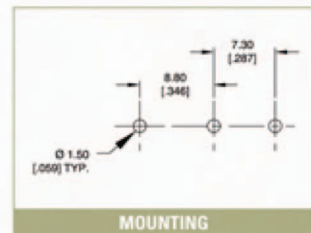
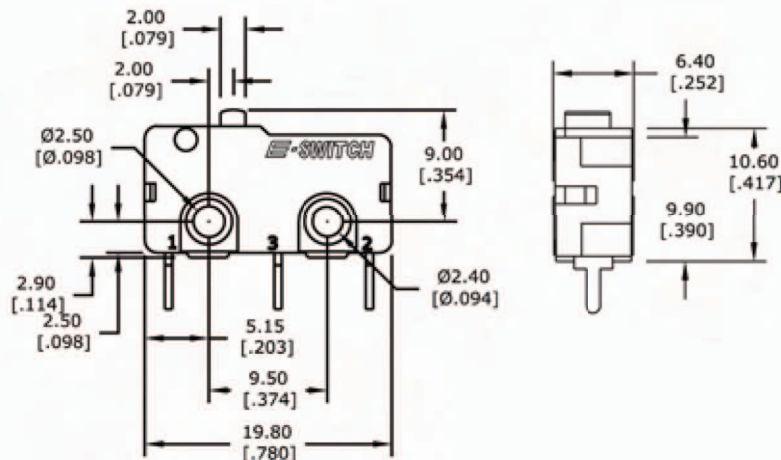
- ▶ Appliance
- ▶ Timing controls
- ▶ Vending machines
- ▶ Gaming
- ▶ Industrial controls
- ▶ Power tools

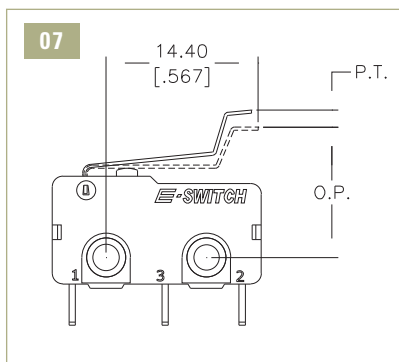
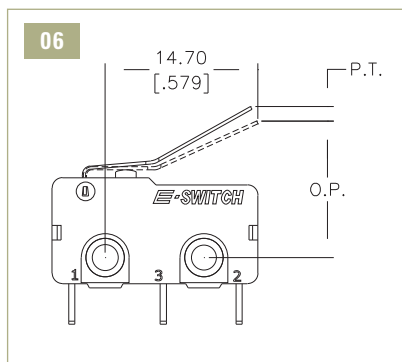
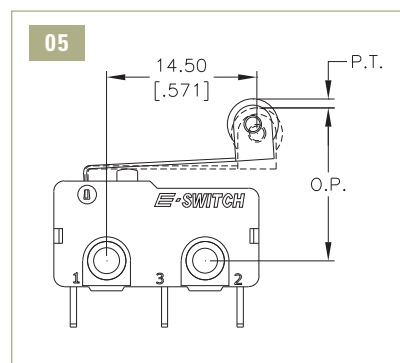
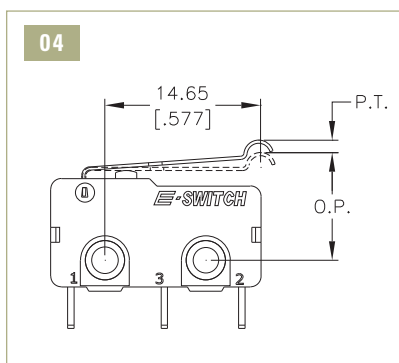
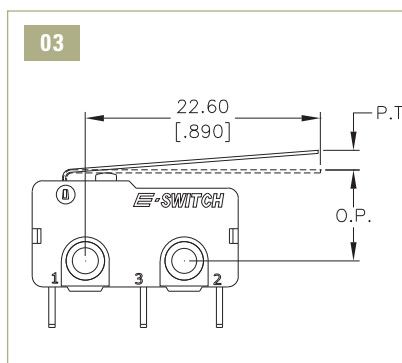
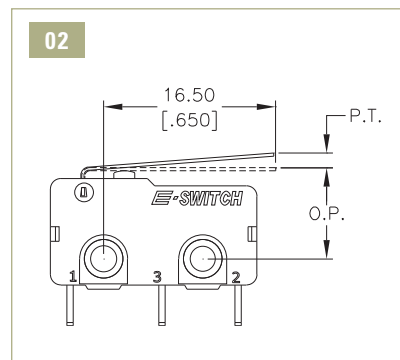
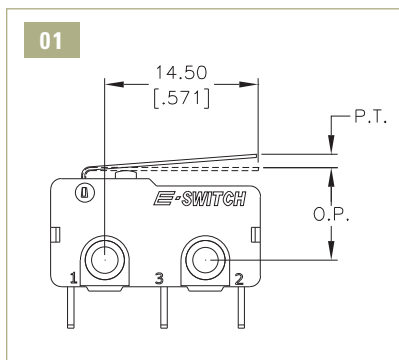
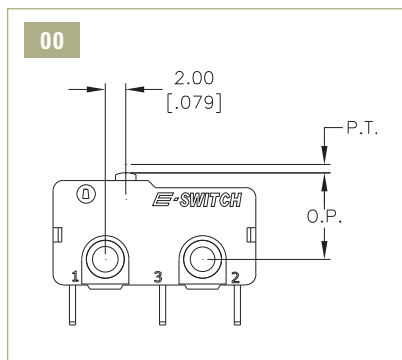
### HOW TO ORDER

SERIES	OPERATING TEMP.	CURRENT RATING	ACTUATOR	OPERATING FORCE	TERMINATION	CIRCUIT
MS	085 = 85C	R1 = Gold 05 = 5A	See Chart	See Chart	S1 = Solder Lug C1 = 0.110" Quick Connect P1 = PCB Pin V1 = Right Angle PCB Pin V2 = Left Angle PCB Pin	A = SPDT C = SPST NO

▶ ▶ ▶ Example Ordering Number  
MS-085-R1-00-F130-S1-A

Specifications subject to change without notice.



**ACTUATOR OPTIONS**


TACT SWITCHES

NAVIGATION SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

ROCKER SWITCHES

SLIDE SWITCHES

SNAP-ACTION SWITCHES

DIP SWITCHES

KEYLOCK SWITCHES

ROTARY SWITCHES

DETECTOR SWITCHES

CAP OPTIONS

**ACTUATOR AND OPERATING FORCE CHART**

Actuator	Actuation/Return Force									
	60+/-25	80+/-25	95+/-30	115+/-40	130+/-40	150+/-40	175+/-45	190+/-45	250+/-50	295+/-55
00	60+/-25	80+/-25	95+/-30	115+/-40	130+/-40	150+/-40	175+/-45	190+/-45	250+/-50	295+/-55
01	20+/-8	25+/-12	30+/-12	35+/-20	40+/-20	45+/-20	50+/-20	55+/-25	70+/-25	85+/-30
02	15+/-6	20+/-8	25+/-12	30+/-12	35+/-20	40+/-20	45+/-20	50+/-20	65+/-25	75+/-25
03	10+/-5	15+/-6	20+/-8	25+/-12	30+/-12	35+/-20	40+/-20	55+/-25	60+/-25	---
04	15+/-6	20+/-8	25+/-12	30+/-12	35+/-20	40+/-20	45+/-20	50+/-20	65+/-25	75+/-25
05	15+/-6	20+/-8	25+/-12	30+/-12	35+/-20	40+/-20	45+/-20	50+/-20	65+/-25	75+/-25
06	15+/-6	20+/-8	25+/-12	30+/-12	35+/-20	40+/-20	45+/-20	50+/-20	65+/-25	75+/-25
07	15+/-6	20+/-8	25+/-12	30+/-12	35+/-20	40+/-20	45+/-20	50+/-20	65+/-25	75+/-25

Actuator	Pre-Travel	Operating Position
00	1.1 max	8.5+/-0.3
01	3.6 max	9.1+/-0.8
02	3.8 max	9.1+/-0.8
03	4.4 max	9.5+/-0.8
04	3.2 max	10.9+/-1.0
05	4.0 max	14.9+/-1.0
06	4.1 max	13.9+/-1.5
07	5.0 max	12.5+/-1.5

PT= Pretravel OP= Operating Point OT= Over Travel



# SERIES MS SWITCHES

## SNAP ACTION SWITCHES - MINIATURE

TACT  
SWITCHES

NAVIGATION  
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PUSHBUTTON  
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SLIDE  
SWITCHES

SNAP-ACTION  
SWITCHES

DIP  
SWITCHES

KEYLOCK  
SWITCHES

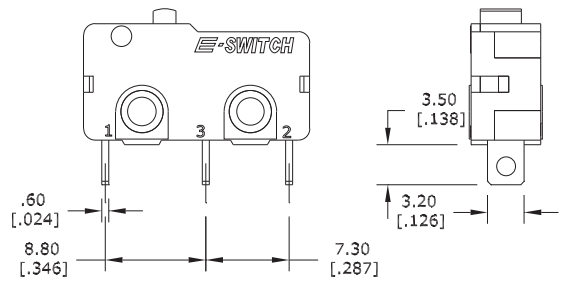
ROTARY  
SWITCHES

DETECTOR  
SWITCHES

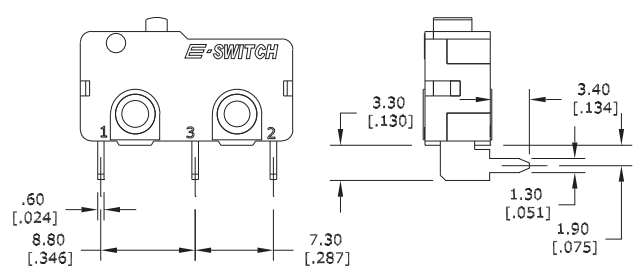
CAP  
OPTIONS

### TERMINATION OPTIONS

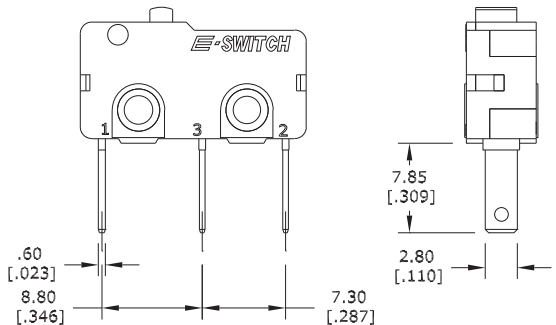
**S1 SOLDER LUG**



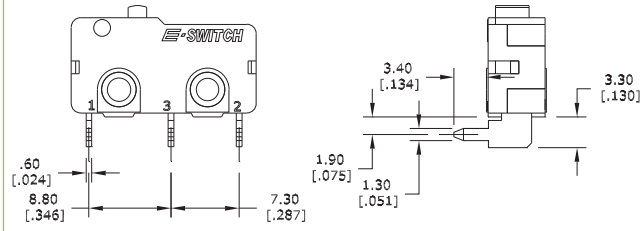
**V1 RIGHT ANGLE PCB PIN**



**C1 0.110" QUICK CONNECT**



**V2 LEFT ANGLE PCB PIN**



**P1 PCB TERMINALS**

