

# MJTP SERIES ULTRA-MINIATURE TACT SWITCHES

## FEATURES

- Numerous single pole-single throw momentary configurations.
- Excellent tactile feed-back (Snap dome).
- Ultra-compact size.
- Long operating life for high reliability.
- Thru-hole and surface mount models available.
- Molded-in terminals minimize wicking of flux or solder.

## MATERIALS

Case: Thermoplastic, color black.  
 Actuator: Thermoplastic, color black unless otherwise specified.  
 Cover/Bracket: PET film, tin plated brass or stainless steel.  
 Terminals: Silver plated brass.  
 Shorting Contact: Phosphor bronze or stainless steel with silver plating.  
 L.E.D. rating: Forward voltage- 2.1 V (3.0 V Max.). Cont. forward current 20mA max. @ 25°C.

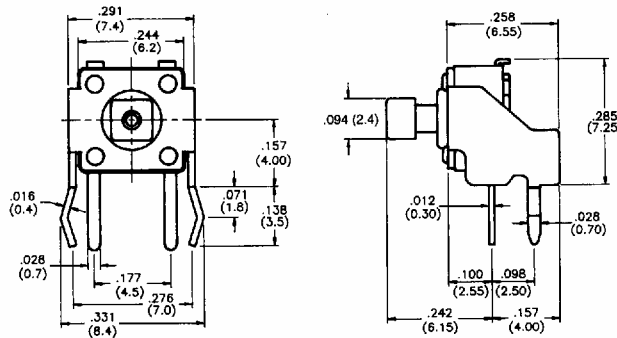
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

<b>GENERAL SPECIFICATIONS</b>	
<b>ELECTRICALS</b>	
Contact rating:	50 mA @ 12 VDC
Insulation resistance:	100 megohms min. (100 VDC)
Dielectric withstanding voltage:	250 VAC for 1 minute
Contact resistance:	100 milliohms max. @ 5 VDC, 10 mA
Electrical life:	100,000 cycles min. (except models MJTP1243 & 1250- 50,000 cycles).
Contact bounce:	less than 10 msec.
<b>MECHANICALS, THERMALS, ENVIRONMENTALS</b>	
Plunger travel:	.010" + .008", - .004" (0,25 +0,2, -0,1 mm)
Actuation force:	160 grams ±30 grams
Operating temperature range:	-20°C to +70°C
Storage temperature range:	-30°C to +80°C for 96 hours
Shock resistance:	30G per method 205, MIL-STD-202
Vibration resistance:	passes method 201, MIL-STD-202
<b>SOLDERING</b> (note - not solvent washable)	
IR reflow soldering:	240°C max. for 20 seconds max.
Wave soldering:	255°C max. for 5 seconds max.
Hand soldering:	320°C max. for 3.5 seconds max. (40 watt iron max.)

**MJTP1105T** Right angle, thru-hole mtg., grounding, blue actuator



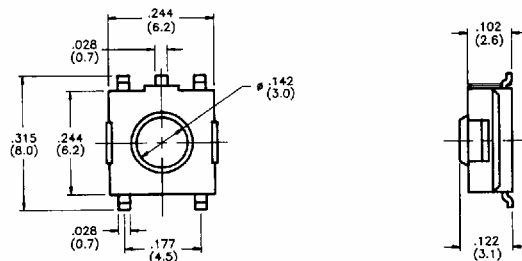
*New!*



**MJTP1122** Surface mtg., green actuator, grounding



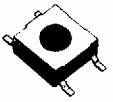
*New!*



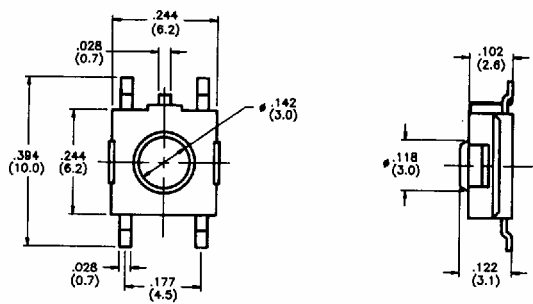
Sealed models available - tape & reel packaging available - consult factory.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

**MJTP1122A**  
Surface mtg.,  
black actuator, grounding



*New!*

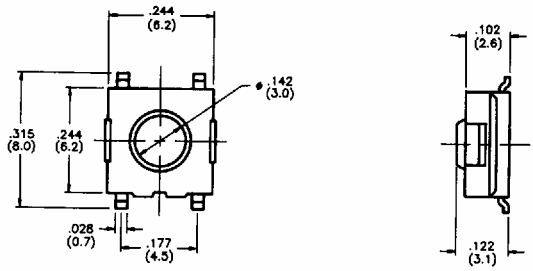


Sealed models available - tape & reel  
packaging available - consult factory.

**MJTP1122B**  
Surface mtg.,  
red actuator



*New!*

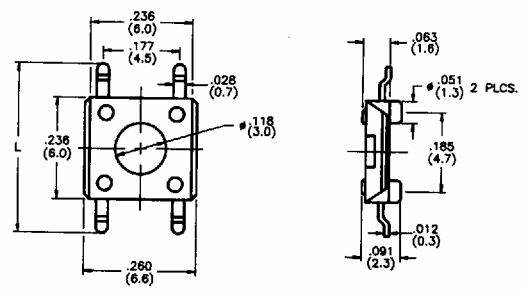


Sealed models available - tape & reel  
packaging available - consult factory.

**MJTP1137**  
Surface mtg.,  
black actuator



*New!*



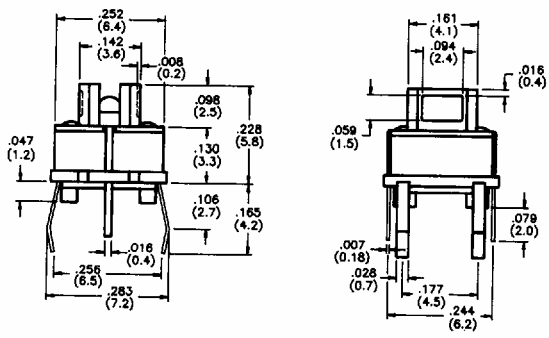
Sealed models available - tape & reel  
packaging available - consult factory.

Model No.	Dim. L
MJTP1137	.315 (8,0)
MJTP1137A	.394 (10,0)

**MJTP1194**  
Thru-hole mtg. with L.E.D.



*New!*



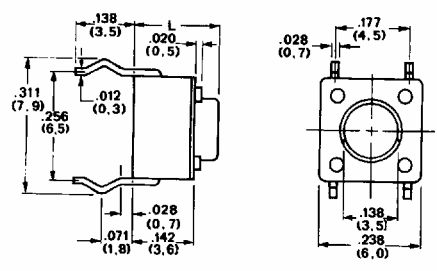
Model No.	L.E.D. Color
MJTP1194	No L.E.D.
MJTP1194R	Red
MJTP1194Y	Yellow
MJTP1194G	Green
MJTP1194W	White

**MJTP1230**  
Thru-hole mtg.,  
black actuator



Model No.	Dim. L
MJTP1230	.170 (4,3)
MJTP1230A	.197 (5,0)
MJTP1230B	.374 (9,5)
MJTP1230C	.315 (8,0)
MJTP1230D	.512 (13,0)
MJTP1230E	.287 (7,3)
MJTP1230F	.335 (8,5)
MJTP1230G	.275 (7,0)

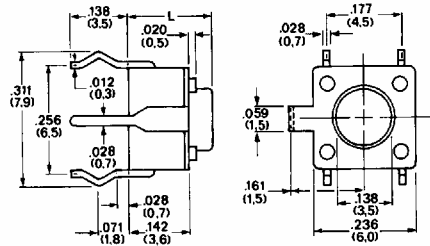
Actuator colors: Black, except 1230C is white, 1230E is ivory and 1230F is gray.



F

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

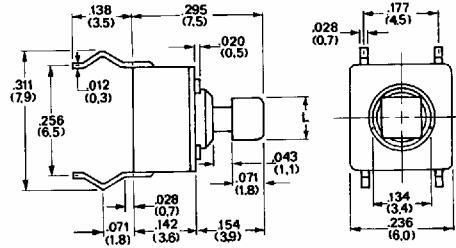
**MJTP1232**  
Thru-hole mtg.,  
grounding



Model No.	Dim. L
MJTP1232	.170 (4,3)
MJTP1232A	.197 (5,0)
MJTP1232B	.374 (9,5)
MJTP1232C	.315 (8,0)
MJTP1232D	.512 (13,0)
MJTP1232E	.287 (7,3)

Actuator color: black - except 1232C is white & 1232E is ivory

**MJTP1234**  
Thru-hole mtg.

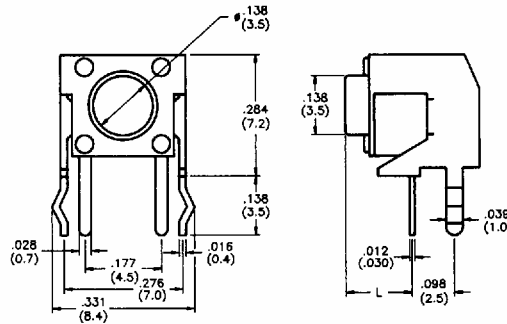


Model No.	Dim. L
MJTP1234	.094 (2,4)
MJTP1234A	.110 (2,8)

Actuator color: 1234 - blue  
1234A - black

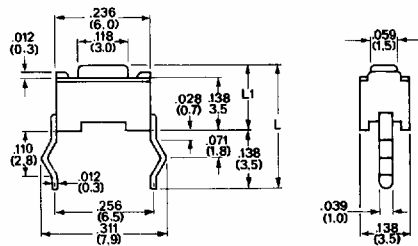
Caps available - consult factory.

**MJTP1236**  
Right angle, thru-hole mtg.,  
grounding, black actuator



Model No.	Dim. L
MJTP1236	.124 (3,1)
MJTP1236A	.152 (3,9)
MJTP1236B	.329 (8,4)
MJTP1236C	.270 (6,9)
MJTP1236D	.466 (11,9)
MJTP1236E	.230 (5,8)

**MJTP1243 & MJTP1250**  
Thru-hole mtg.



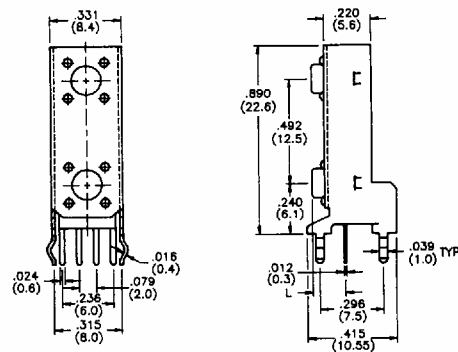
Model No.	Dim. L1	Dim. L
MJTP1243	.169 (4,3)	.307 (7,8)
MJTP1250	.197 (5,0)	.335 (8,5)

Actuator color: 1243 - black  
1250 - white

**MJTP2205**  
2 switch vert. gang  
ass'y., black actuators

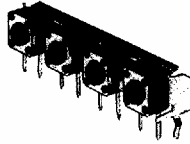


*New!*

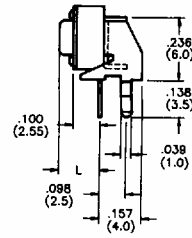
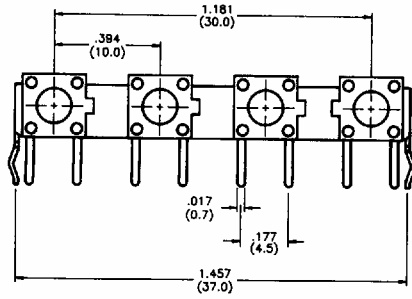


Model No.	Dim. L
MJTP2205	.124 (3,15)
MJTP2205A	.152 (3,85)
MJTP2205B	.329 (8,35)
MJTP2205C	.270 (6,85)
MJTP2205D	.466 (11,85)
MJTP2205E	.242 (6,15)

**MJTP4102**  
4 switch hor. gang ass'y.,  
black actuators

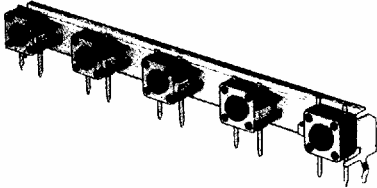


*New!*

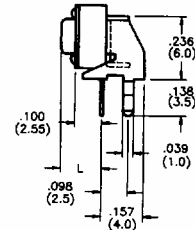
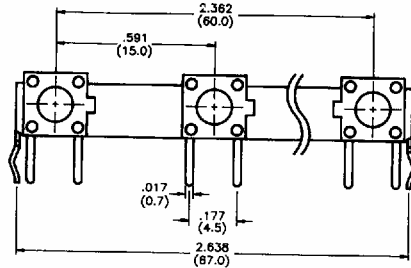


Model No.	Dim. L
MJTP4102	.125 (3,2)
MJTP4102A	.152 (3,85)
MJTP4102B	.329 (8,35)

**MJTP5302**  
5 switch hor. gang ass'y.,  
black actuators



*New!*

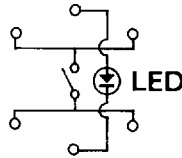


Model No.	Dim. L
MJTP5302	.125 (3,2)
MJTP5302A	.152 (3,85)
MJTP5302B	.329 (8,35)

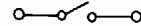
**SCHEMATICS**

Note-schematics for MJTP2205, 4102 & 5302 same as MJTP1122 except x2, x4 & x5 respectively.

MJTP1122,  
MJTP1137,  
MJTP1194,  
MJTP1230,  
MJTP1232 &  
MJTP1234  
(L.E.D. for MJTP1194 only)

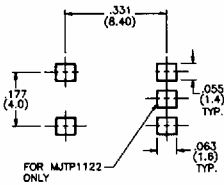


MJTP1105T,  
MJTP1236,  
MJTP1243 &  
MJTP1250

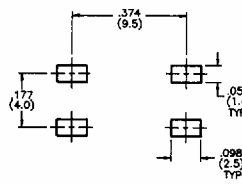


**PRINTED CIRCUIT BOARD LAYOUTS**

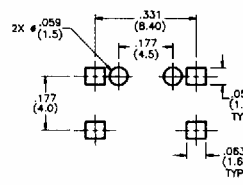
Layout Tolerances; Linear: ±.004" (±0,1mm) Holes: ±.002" (±0,05mm) Pads: ±.008" (±0,2mm)



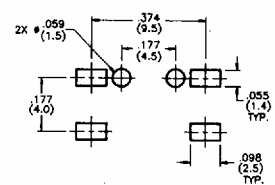
MJTP1122 & 1122B



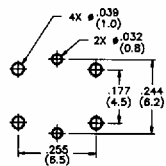
MJTP1122A



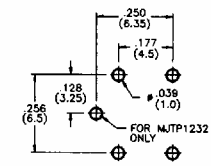
MJTP1137



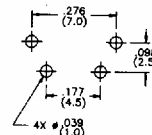
MJTP1137A



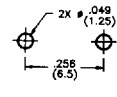
MJTP1194



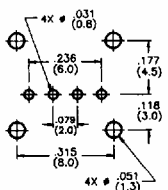
MJTP1230, 1232 & 1234



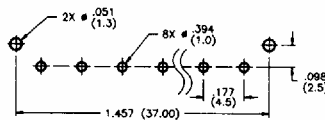
MJTP1105T & 1236



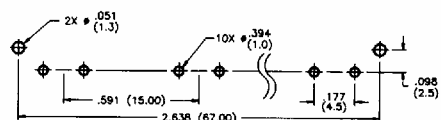
MJTP1243 & 1250



MJTP2205



MJTP4102



MJTP5302

96E 6346802 0001432 520