

MJTP/PHAP33 series

6mm Square tact switches •
Through hole



DISTINCTIVE FEATURES

- Numerous single pole / single throw momentary configurations
- Excellent tactile feedback (snap dome)
- Ultra compact size
- Long operating life for high reliability
- Molded-in terminals minimizing wicking of flux or solder



ENVIRONMENTAL SPECIFICATIONS

- Operating Temperature: -20 °C to +70 °C (-4°F to +158 °F)
- Storage Temperature: -30 °C to +80 °C (-22 °F to +176 °F) for 96 hours
- Wave soldering: 255 °C for 5 seconds max
- Manual soldering: 300 °C for 3 seconds max



ELECTRICAL SPECIFICATIONS

- Contact rating: 50 mA 12VDC
- Contact Resistance: 100 mΩ - 500 mΩ max. depending on series
- Insulation Resistance: 100 MΩ min. at 100VDC
- Dielectric withstanding voltage: 250 VAC / 1 minute
- Electrical life: 50,000 - 100,000 cycles min. depending on series
- Contact bounce: Less than 10 msec.



MECHANICAL SPECIFICATIONS

- Operating force: 160 gf ±30gf
- Mechanical life:
 - 100,000 cycles min.
- Plunger travel: 0.25 +0.2, -0.1mm (0.010 +.008, .004")



MATERIALS

- Body: Thermoplastic
- Contact: Phosphor bronze or stainless steel with silver plating
- Cover: PET film, tin plated brass or Stainless Steel
- Terminals: Silver plated brass
- Actuator: Thermoplastic
- LED rating: Forward voltage 2.1 (3.0V max.)
Cont. forward current 20mA max at 25°C

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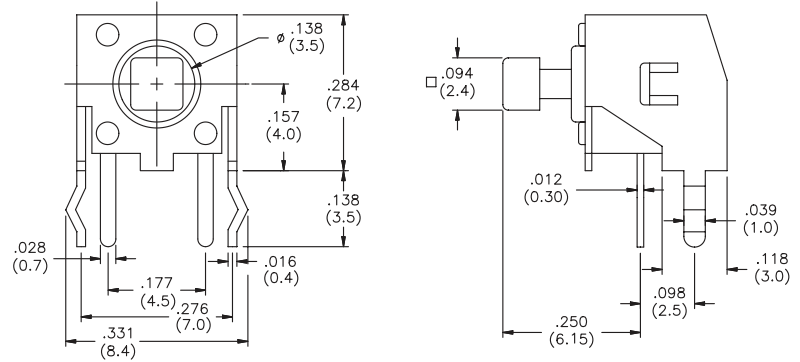
MJTP1105T
PHAP3305T

Right angle, grounding,
edge of PCB mounting

Bulk packaging



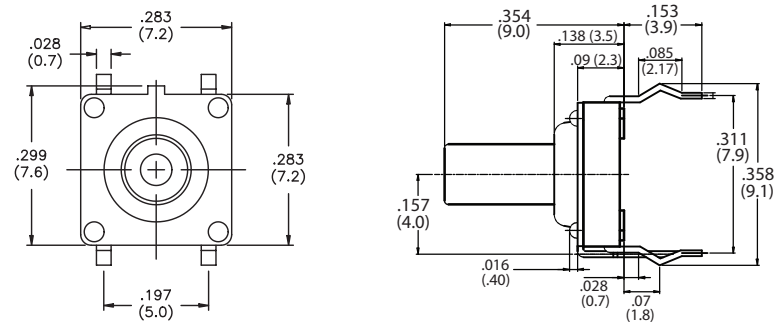
Caps available:
See end of section



MJTP1109A
PHAP3350A

Process compatible,
grounding

Bulk packaging

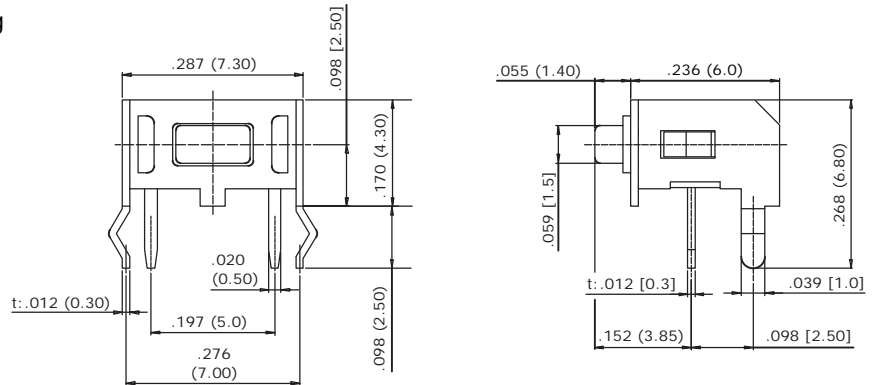


MJTP1117
PHAP3363

Right angle, grounding

Bulk packaging

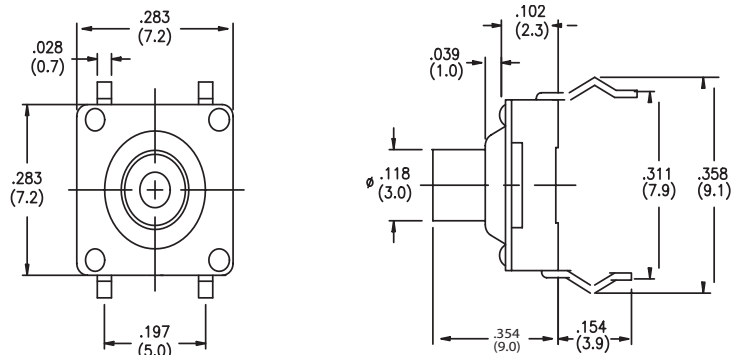
Actuation Force:
180gf +/-50g



MJTP1119A
PHAP3351A

Process compatible

Bulk packaging



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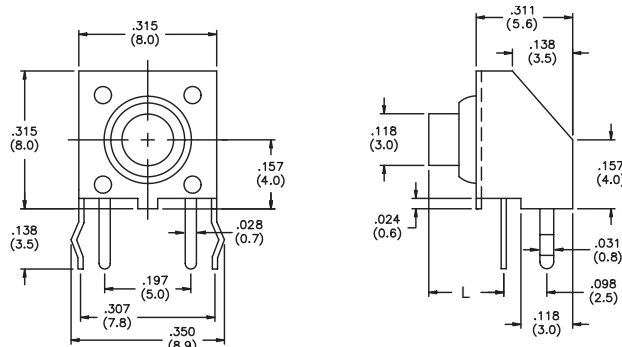
MJTP1129
PHAP3352

Right angle, grounding
process compatible

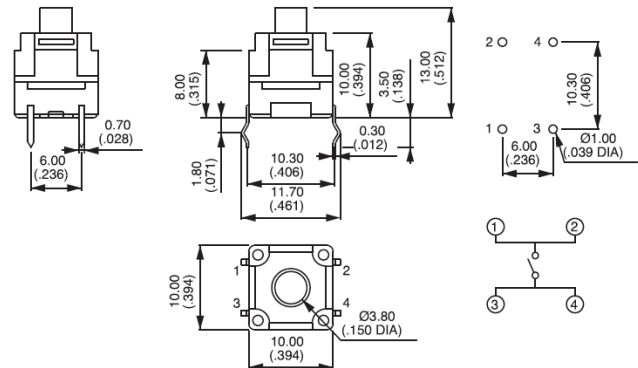
Bulk packaging



Model #	Dimensions L (in/mm)
MJTP1129	.171 (4.35)
MJTP1129A	.329 (8.35)
MJTP1129B	.486 (12.35)



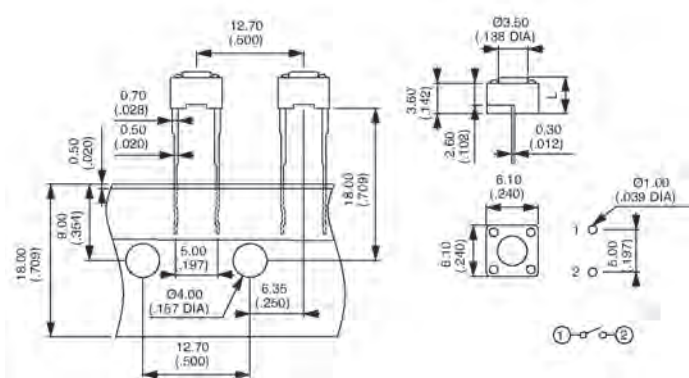
PHAP3353



PHAP3307



Model #	Dimensions L (in/mm)
PHAP3307	.169 (4.3)
PHAP3307A	.197 (5.00)
PHAP3307G	.276 (7.00)



MJTP11936
PHAP3308R
MJTP11933
PHAP3308G

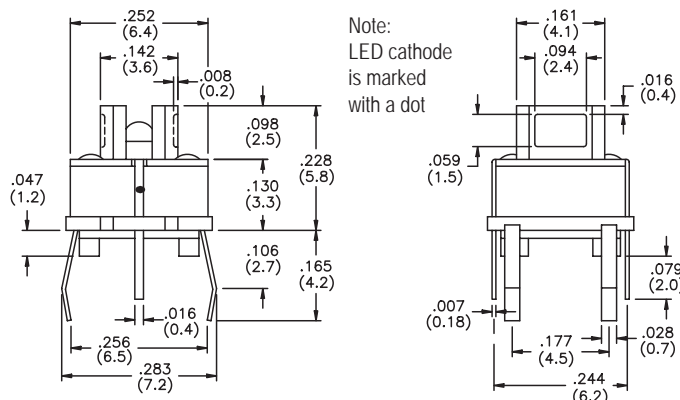
With LED

Bulk packaging

Caps available:
See end of section



Model #	LED color
MJTP11936 PHAP3308R	Red
MJTP11933 PHAP3308G	Green



MJTP/PHAP33 series

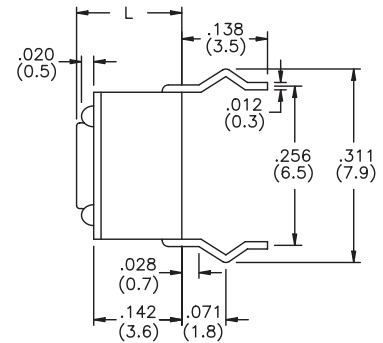
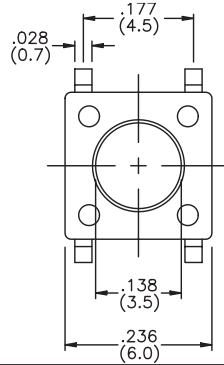
6mm Square tact switches • through hole

MJTP1230
PHAP3301



Bulk packaging

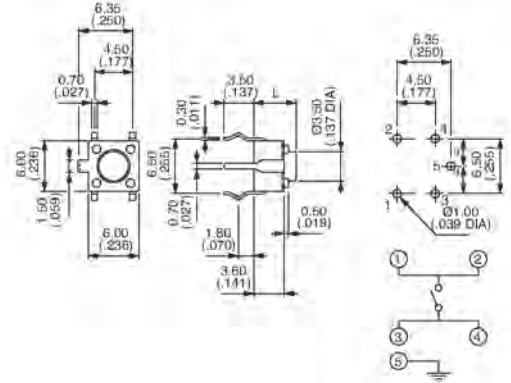
Model #	Dimensions L (in/mm)
MJTP1230 PHAP3301	.170 (4.3)
MJTP1230A PHAP3301A	.197 (5.0)
MJTP1230B PHAP3301B	.374 (9.5)
MJTP1230C PHAP3301C	.315 (8.0)
MJTP1230D PHAP3301D	.512 (13.0)
MJTP1230G PHAP3301G	.275 (7.0)



PHAP3302



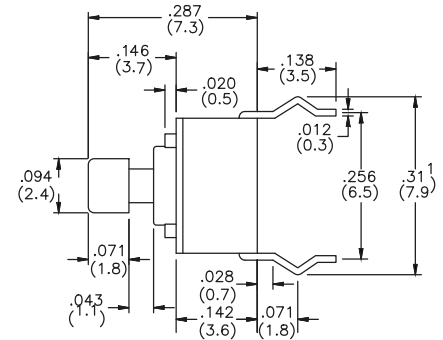
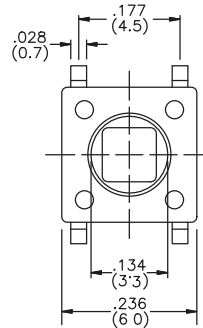
Model #	Dimensions L (in/mm)	Actuator color
PHAP3302	.170(4.3)	black
PHAP3302A	.197(5.0)	black
PHAP3302B	.374(9.5)	black
PHAP3302C	.315(8.0)	white
PHAP3302D	.512(13.0)	black
PHAP3302E	.275(7.3)	ivory



MJTP1234
PHAP3303



Bulk package

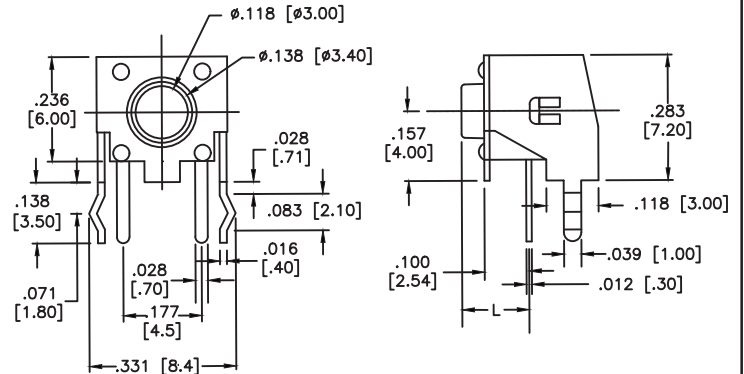


MJTP1236
PHAP3305



Right angle, grounding
Bulk packaging

Model #	Dimensions L (in/mm)
MJTP1236 PHAP3305	.124 (3.1)
MJTP1236A PHAP3305A	.152 (3.9)
MJTP1236F PHAP3305F	.289 (7.3)
MJTP1230G PHAP3305G	.230 (5.8)

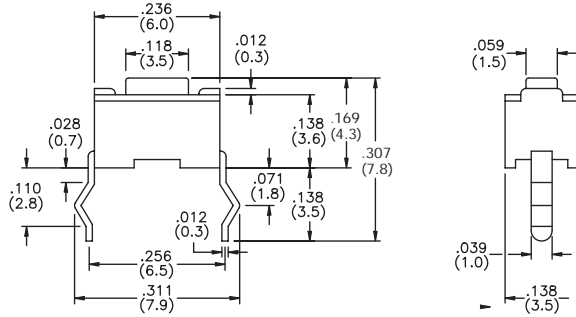


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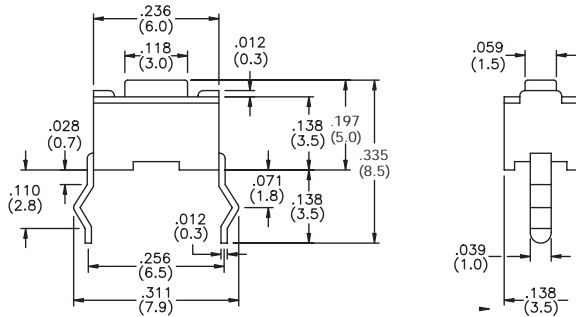
MJTP1243
PHAP3362

Bulk packaging



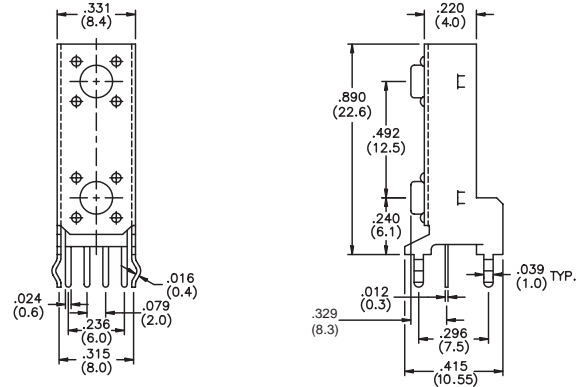
MJTP1250
PHAP3362A

Bulk packaging



MJTP2205B
PHAP3306

Bulk package



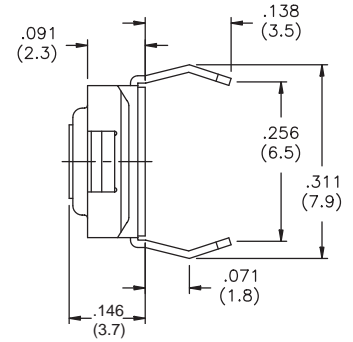
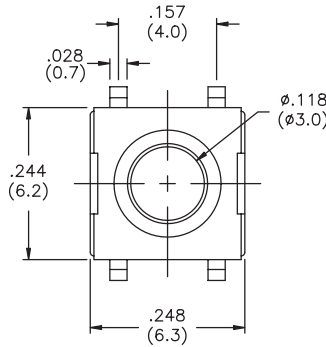
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MJTPSHWB

Process compatible

Bulk packaging



CAPS (for MJTP1105T/PHAP3305T and MJTP1234/PHAP3303 only)		CAPS (for MJTP1193 / PHAP3308 only)	CAP COLORS														
<p>MJ61/U552 Square cap</p>	<p>MJ62/U553 Round cap</p>	<p>MJ3 Square cap with clear lens in center for LED illumination</p>	<p>Note: add digit from table to cap part number for color. Example: MJ612 indicates square black cap.</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Color</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Blue</td> </tr> <tr> <td>2</td> <td>Black</td> </tr> <tr> <td>3</td> <td>Green</td> </tr> <tr> <td>5</td> <td>Yellow</td> </tr> <tr> <td>6</td> <td>Red</td> </tr> <tr> <td>7</td> <td>Ivory</td> </tr> </tbody> </table>	No.	Color	1	Blue	2	Black	3	Green	5	Yellow	6	Red	7	Ivory
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SCHEMATICS					
MJTP1109 PHAP3350A MJTP1119 PHAP3351A MJTP1193 PHAP3308	MJTP1230 PHAP3301 MJTP1234 PHAP3303 MJTP2205 PHAP3306	MJTPSHW Note: LED is for MJTP1193/PHAP3308 only		MJTP1105 PHAP3305 MJTP1117 PHAP3363 MJTP1129 PHAP3352	MJTP1236 PHAP3305 MJTP1243 PHAP3362 MJTP1250 PHAP3362A

PRINTED CIRCUIT BOARD LAYOUTS					
MJTP1105T PHAP3305T	MJTP1109 PHAP3350A	MJTP1117 PHAP3363	MJTP1119 PHAP3351A	MJTP1129 PHAP3352	
MJTP1193 PHAP3308	MJTP1230 PHAP3301	MJTP1234 PHAP3303	MJTP1236 PHAP3305	MJTP1243 PHAP3362	
MJTP1250 PHAP3362A		MJTPSHW		MJTP2205 PHAP3306	