

TACT switch

**Snap-in & Surface
mount Type (6 X 6 mm)**

MODEL NO.
1102 Series

Features

Snap-in & Surface mount type tact switch.

Outline dimension 6.0mm x 6.0mm and several kinds of height

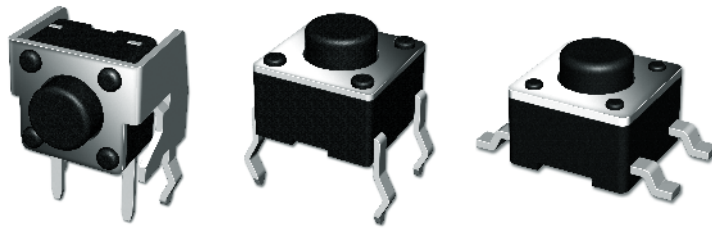
Vertical and horizontal operating direction.

Applications

Various controls for devices in automotive.

Controls for image/sound devices, radio equipment.

Operating signal input switches, etc.



Main Specifications

Rating	50mA 12V DC		
Travel	0.25±0.1mm		
Contact Resistance	100 mΩ max.		
Operating temperature	-20℃ ~ 70℃(45% ~ 85% RH)		
Bounce	10 m sec max.		
Operating Force	130gf	160gf	250gf
Operating Life	100,000 Cycles		

Subsidiary Production Code

Snap-in Type

Code number	Operating direction	Terminal shape	Ground & Support cover	Cover Type
1102□	Vertical	Snap-in	Without	1
1102N□	Horizontal		Straight	With
1102NS□		3		
1102H□		Snap-in		

SMT (Surface Mount Type)

Code number	Operating direction	Terminal shape	Ground & Support cover	Cover Type
1102S□9	Vertical	9 mm	Without	5
1102S □10		10 mm		6
1102W □8		8 mm		7
1102W □9		9 mm		8
1102SP □		9 mm / 10mm	With	9
1102US □	Horizontal	Bracket shape: Next page see drawing		10
1102USL□				11
1102US10 □				12

No.	3D	Dimension Type	P.C.B pattern dimension																																										
1		1102□ Unit : mm 	<table><tr><td>□</td><td>h</td><td>ØA</td></tr><tr><td>-</td><td>4.3</td><td>3.5</td></tr><tr><td>A</td><td>5</td><td>3.5</td></tr><tr><td>B</td><td>7</td><td>3.3</td></tr><tr><td>E</td><td>7.3</td><td>3.3</td></tr><tr><td>C</td><td>8</td><td>3.3</td></tr><tr><td>D</td><td>9.5</td><td>3</td></tr><tr><td>H</td><td>9.7</td><td>3</td></tr><tr><td>F</td><td>12.5</td><td>3</td></tr><tr><td>G</td><td>13.5</td><td>3</td></tr><tr><td>J</td><td>16.3</td><td>3</td></tr><tr><td>I</td><td>17</td><td>3</td></tr><tr><td>T</td><td>□2.4x2.4</td><td></td></tr><tr><td>TA</td><td>□2.8x2.8</td><td></td></tr></table> Circuit Diagram 	□	h	ØA	-	4.3	3.5	A	5	3.5	B	7	3.3	E	7.3	3.3	C	8	3.3	D	9.5	3	H	9.7	3	F	12.5	3	G	13.5	3	J	16.3	3	I	17	3	T	□2.4x2.4		TA	□2.8x2.8	
		□	h	ØA																																									
-	4.3	3.5																																											
A	5	3.5																																											
B	7	3.3																																											
E	7.3	3.3																																											
C	8	3.3																																											
D	9.5	3																																											
H	9.7	3																																											
F	12.5	3																																											
G	13.5	3																																											
J	16.3	3																																											
I	17	3																																											
T	□2.4x2.4																																												
TA	□2.8x2.8																																												
2		1102N□ Unit : mm 	<table><tr><td>□</td><td>l</td><td>ØA</td></tr><tr><td>-</td><td>3.15</td><td>3.5</td></tr><tr><td>A</td><td>3.85</td><td>3.5</td></tr><tr><td>B</td><td>5.85</td><td>3.3</td></tr><tr><td>E</td><td>6.15</td><td>3.3</td></tr><tr><td>C</td><td>6.85</td><td>3.3</td></tr><tr><td>D</td><td>8.35</td><td>3</td></tr><tr><td>H</td><td>8.55</td><td>3</td></tr><tr><td>F</td><td>11.35</td><td>3</td></tr><tr><td>G</td><td>12.35</td><td>3</td></tr><tr><td>J</td><td>15.15</td><td>3</td></tr><tr><td>I</td><td>15.35</td><td>3</td></tr><tr><td>T</td><td>□2.4x2.4</td><td></td></tr><tr><td>TA</td><td>□2.8x2.8</td><td></td></tr></table> Circuit Diagram 	□	l	ØA	-	3.15	3.5	A	3.85	3.5	B	5.85	3.3	E	6.15	3.3	C	6.85	3.3	D	8.35	3	H	8.55	3	F	11.35	3	G	12.35	3	J	15.15	3	I	15.35	3	T	□2.4x2.4		TA	□2.8x2.8	
		□	l	ØA																																									
-	3.15	3.5																																											
A	3.85	3.5																																											
B	5.85	3.3																																											
E	6.15	3.3																																											
C	6.85	3.3																																											
D	8.35	3																																											
H	8.55	3																																											
F	11.35	3																																											
G	12.35	3																																											
J	15.15	3																																											
I	15.35	3																																											
T	□2.4x2.4																																												
TA	□2.8x2.8																																												
3		1102NS□ Unit : mm 	<table><tr><td>□</td><td>l</td><td>ØA</td></tr><tr><td>-</td><td>3.15</td><td>3.5</td></tr><tr><td>A</td><td>3.85</td><td>3.5</td></tr><tr><td>B</td><td>5.85</td><td>3.3</td></tr><tr><td>E</td><td>6.15</td><td>3.3</td></tr><tr><td>C</td><td>6.85</td><td>3.3</td></tr><tr><td>D</td><td>8.35</td><td>3</td></tr><tr><td>H</td><td>8.55</td><td>3</td></tr><tr><td>F</td><td>11.35</td><td>3</td></tr><tr><td>G</td><td>12.35</td><td>3</td></tr><tr><td>J</td><td>15.15</td><td>3</td></tr><tr><td>I</td><td>15.35</td><td>3</td></tr><tr><td>T</td><td>□2.4x2.4</td><td></td></tr><tr><td>TA</td><td>□2.8x2.8</td><td></td></tr></table> Circuit Diagram 	□	l	ØA	-	3.15	3.5	A	3.85	3.5	B	5.85	3.3	E	6.15	3.3	C	6.85	3.3	D	8.35	3	H	8.55	3	F	11.35	3	G	12.35	3	J	15.15	3	I	15.35	3	T	□2.4x2.4		TA	□2.8x2.8	
		□	l	ØA																																									
-	3.15	3.5																																											
A	3.85	3.5																																											
B	5.85	3.3																																											
E	6.15	3.3																																											
C	6.85	3.3																																											
D	8.35	3																																											
H	8.55	3																																											
F	11.35	3																																											
G	12.35	3																																											
J	15.15	3																																											
I	15.35	3																																											
T	□2.4x2.4																																												
TA	□2.8x2.8																																												
4		1102H□ Unit : mm 	<table><tr><td>□</td><td>l</td><td>ØA</td></tr><tr><td>-</td><td>3.15</td><td>3.5</td></tr><tr><td>A</td><td>3.85</td><td>3.5</td></tr><tr><td>B</td><td>5.85</td><td>3.3</td></tr><tr><td>E</td><td>6.15</td><td>3.3</td></tr><tr><td>C</td><td>6.85</td><td>3.3</td></tr><tr><td>D</td><td>8.35</td><td>3</td></tr><tr><td>H</td><td>8.55</td><td>3</td></tr><tr><td>F</td><td>11.35</td><td>3</td></tr><tr><td>G</td><td>12.35</td><td>3</td></tr><tr><td>J</td><td>15.15</td><td>3</td></tr><tr><td>I</td><td>15.35</td><td>3</td></tr><tr><td>T</td><td>□2.4x2.4</td><td></td></tr><tr><td>TA</td><td>□2.8x2.8</td><td></td></tr></table> Circuit Diagram 	□	l	ØA	-	3.15	3.5	A	3.85	3.5	B	5.85	3.3	E	6.15	3.3	C	6.85	3.3	D	8.35	3	H	8.55	3	F	11.35	3	G	12.35	3	J	15.15	3	I	15.35	3	T	□2.4x2.4		TA	□2.8x2.8	
		□	l	ØA																																									
-	3.15	3.5																																											
A	3.85	3.5																																											
B	5.85	3.3																																											
E	6.15	3.3																																											
C	6.85	3.3																																											
D	8.35	3																																											
H	8.55	3																																											
F	11.35	3																																											
G	12.35	3																																											
J	15.15	3																																											
I	15.35	3																																											
T	□2.4x2.4																																												
TA	□2.8x2.8																																												

No.	3D	Dimension Type		P.C.B pattern dimension																								
5		1102S□9																										
		Unit : mm	<table><tr><th>□</th><th>h</th><th>ØA</th></tr><tr><td>-</td><td>4.3</td><td>3.5</td></tr><tr><td>A</td><td>5</td><td>3.5</td></tr><tr><td>B</td><td>7</td><td>3.3</td></tr><tr><td>E</td><td>7.3</td><td>3.3</td></tr><tr><td>C</td><td>8</td><td>3.3</td></tr><tr><td>D</td><td>9.5</td><td>3</td></tr><tr><td>T</td><td>□2.4x2.4</td><td></td></tr><tr><td>TA</td><td>□2.8x2.8</td><td></td></tr></table>	□	h	ØA	-	4.3	3.5	A	5	3.5	B	7	3.3	E	7.3	3.3	C	8	3.3	D	9.5	3	T	□2.4x2.4		TA
□	h	ØA																										
-	4.3	3.5																										
A	5	3.5																										
B	7	3.3																										
E	7.3	3.3																										
C	8	3.3																										
D	9.5	3																										
T	□2.4x2.4																											
TA	□2.8x2.8																											
6		1102S□10																										
		Unit : mm	<table><tr><th>□</th><th>h</th><th>ØA</th></tr><tr><td>-</td><td>4.3</td><td>3.5</td></tr><tr><td>A</td><td>5</td><td>3.5</td></tr><tr><td>B</td><td>7</td><td>3.3</td></tr><tr><td>E</td><td>7.3</td><td>3.3</td></tr><tr><td>C</td><td>8</td><td>3.3</td></tr><tr><td>D</td><td>9.5</td><td>3</td></tr><tr><td>T</td><td>□2.4x2.4</td><td></td></tr><tr><td>TA</td><td>□2.8x2.8</td><td></td></tr></table>	□	h	ØA	-	4.3	3.5	A	5	3.5	B	7	3.3	E	7.3	3.3	C	8	3.3	D	9.5	3	T	□2.4x2.4		TA
□	h	ØA																										
-	4.3	3.5																										
A	5	3.5																										
B	7	3.3																										
E	7.3	3.3																										
C	8	3.3																										
D	9.5	3																										
T	□2.4x2.4																											
TA	□2.8x2.8																											
7		1102W□8																										
		Unit : mm	<table><tr><th>□</th><th>h</th><th>ØA</th></tr><tr><td>-</td><td>4.3</td><td>3.5</td></tr><tr><td>A</td><td>5</td><td>3.5</td></tr><tr><td>B</td><td>7</td><td>3.3</td></tr><tr><td>E</td><td>7.3</td><td>3.3</td></tr><tr><td>C</td><td>8</td><td>3.3</td></tr><tr><td>D</td><td>9.5</td><td>3</td></tr><tr><td>T</td><td>□2.4x2.4</td><td></td></tr><tr><td>TA</td><td>□2.8x2.8</td><td></td></tr></table>	□	h	ØA	-	4.3	3.5	A	5	3.5	B	7	3.3	E	7.3	3.3	C	8	3.3	D	9.5	3	T	□2.4x2.4		TA
□	h	ØA																										
-	4.3	3.5																										
A	5	3.5																										
B	7	3.3																										
E	7.3	3.3																										
C	8	3.3																										
D	9.5	3																										
T	□2.4x2.4																											
TA	□2.8x2.8																											
8		1102W□9																										
		Unit : mm	<table><tr><th>□</th><th>h</th><th>ØA</th></tr><tr><td>-</td><td>4.3</td><td>3.5</td></tr><tr><td>A</td><td>5</td><td>3.5</td></tr><tr><td>B</td><td>7</td><td>3.3</td></tr><tr><td>E</td><td>7.3</td><td>3.3</td></tr><tr><td>C</td><td>8</td><td>3.3</td></tr><tr><td>D</td><td>9.5</td><td>3</td></tr><tr><td>T</td><td>□2.4x2.4</td><td></td></tr><tr><td>TA</td><td>□2.8x2.8</td><td></td></tr></table>	□	h	ØA	-	4.3	3.5	A	5	3.5	B	7	3.3	E	7.3	3.3	C	8	3.3	D	9.5	3	T	□2.4x2.4		TA
□	h	ØA																										
-	4.3	3.5																										
A	5	3.5																										
B	7	3.3																										
E	7.3	3.3																										
C	8	3.3																										
D	9.5	3																										
T	□2.4x2.4																											
TA	□2.8x2.8																											

No.	3D	Dimension Type	P.C.B pattern dimension																																											
9		1102SP□																																												
		Unit : mm <table><tr><td>□</td><td>h</td><td>ØA</td></tr><tr><td>-</td><td>4.3</td><td>3.5</td></tr><tr><td>A</td><td>5</td><td>3.5</td></tr><tr><td>B</td><td>7</td><td>3.3</td></tr><tr><td>E</td><td>7.3</td><td>3.3</td></tr><tr><td>C</td><td>8</td><td>3.3</td></tr><tr><td>D</td><td>9.5</td><td>3</td></tr><tr><td>T</td><td>□2.4x2.4</td><td></td></tr><tr><td>TA</td><td>□2.8x2.8</td><td></td></tr></table> Circuit Diagram	□	h	ØA	-	4.3	3.5	A	5	3.5	B	7	3.3	E	7.3	3.3	C	8	3.3	D	9.5	3	T	□2.4x2.4		TA	□2.8x2.8		10		1102US□														
□	h	ØA																																												
-	4.3	3.5																																												
A	5	3.5																																												
B	7	3.3																																												
E	7.3	3.3																																												
C	8	3.3																																												
D	9.5	3																																												
T	□2.4x2.4																																													
TA	□2.8x2.8																																													
Unit : mm <table><tr><td>□</td><td>l</td><td>ØA</td></tr><tr><td>-</td><td>3.15</td><td>3.5</td></tr><tr><td>A</td><td>3.85</td><td>3.5</td></tr><tr><td>B</td><td>5.85</td><td>3.3</td></tr><tr><td>E</td><td>6.15</td><td>3.3</td></tr><tr><td>C</td><td>6.85</td><td>3.3</td></tr><tr><td>D</td><td>8.35</td><td>3</td></tr><tr><td>H</td><td>8.55</td><td>3</td></tr><tr><td>F</td><td>11.35</td><td>3</td></tr><tr><td>G</td><td>12.35</td><td>3</td></tr><tr><td>J</td><td>15.15</td><td>3</td></tr><tr><td>I</td><td>15.35</td><td>3</td></tr><tr><td>T</td><td>□2.4x2.4</td><td></td></tr><tr><td>TA</td><td>□2.8x2.8</td><td></td></tr></table> Circuit Diagram	□	l	ØA	-	3.15	3.5	A	3.85	3.5	B	5.85	3.3	E	6.15	3.3	C	6.85	3.3	D	8.35	3	H	8.55	3	F	11.35	3	G	12.35	3	J	15.15	3	I	15.35	3	T	□2.4x2.4		TA	□2.8x2.8		11		1102USL□	
□	l	ØA																																												
-	3.15	3.5																																												
A	3.85	3.5																																												
B	5.85	3.3																																												
E	6.15	3.3																																												
C	6.85	3.3																																												
D	8.35	3																																												
H	8.55	3																																												
F	11.35	3																																												
G	12.35	3																																												
J	15.15	3																																												
I	15.35	3																																												
T	□2.4x2.4																																													
TA	□2.8x2.8																																													
Unit : mm <table><tr><td>□</td><td>l</td><td>ØA</td></tr><tr><td>-</td><td>3.15</td><td>3.5</td></tr><tr><td>A</td><td>3.85</td><td>3.5</td></tr><tr><td>B</td><td>5.85</td><td>3.3</td></tr><tr><td>E</td><td>6.15</td><td>3.3</td></tr><tr><td>C</td><td>6.85</td><td>3.3</td></tr><tr><td>D</td><td>8.35</td><td>3</td></tr><tr><td>H</td><td>8.55</td><td>3</td></tr><tr><td>F</td><td>11.35</td><td>3</td></tr><tr><td>G</td><td>12.35</td><td>3</td></tr><tr><td>J</td><td>15.15</td><td>3</td></tr><tr><td>I</td><td>15.35</td><td>3</td></tr><tr><td>T</td><td>□2.4x2.4</td><td></td></tr><tr><td>TA</td><td>□2.8x2.8</td><td></td></tr></table> Circuit Diagram	□	l	ØA	-	3.15	3.5	A	3.85	3.5	B	5.85	3.3	E	6.15	3.3	C	6.85	3.3	D	8.35	3	H	8.55	3	F	11.35	3	G	12.35	3	J	15.15	3	I	15.35	3	T	□2.4x2.4		TA	□2.8x2.8		12		1102US10□	
□	l	ØA																																												
-	3.15	3.5																																												
A	3.85	3.5																																												
B	5.85	3.3																																												
E	6.15	3.3																																												
C	6.85	3.3																																												
D	8.35	3																																												
H	8.55	3																																												
F	11.35	3																																												
G	12.35	3																																												
J	15.15	3																																												
I	15.35	3																																												
T	□2.4x2.4																																													
TA	□2.8x2.8																																													
Unit : mm <table><tr><td>□</td><td>l</td><td>ØA</td></tr><tr><td>-</td><td>3.15</td><td>3.5</td></tr><tr><td>A</td><td>3.85</td><td>3.5</td></tr><tr><td>B</td><td>5.85</td><td>3.3</td></tr><tr><td>E</td><td>6.15</td><td>3.3</td></tr><tr><td>C</td><td>6.85</td><td>3.3</td></tr><tr><td>D</td><td>8.35</td><td>3</td></tr><tr><td>H</td><td>8.55</td><td>3</td></tr><tr><td>F</td><td>11.35</td><td>3</td></tr><tr><td>G</td><td>12.35</td><td>3</td></tr><tr><td>J</td><td>15.15</td><td>3</td></tr><tr><td>I</td><td>15.35</td><td>3</td></tr><tr><td>T</td><td>□2.4x2.4</td><td></td></tr><tr><td>TA</td><td>□2.8x2.8</td><td></td></tr></table> Circuit Diagram	□	l	ØA	-	3.15	3.5	A	3.85	3.5	B	5.85	3.3	E	6.15	3.3	C	6.85	3.3	D	8.35	3	H	8.55	3	F	11.35	3	G	12.35	3	J	15.15	3	I	15.35	3	T	□2.4x2.4		TA	□2.8x2.8					
□	l	ØA																																												
-	3.15	3.5																																												
A	3.85	3.5																																												
B	5.85	3.3																																												
E	6.15	3.3																																												
C	6.85	3.3																																												
D	8.35	3																																												
H	8.55	3																																												
F	11.35	3																																												
G	12.35	3																																												
J	15.15	3																																												
I	15.35	3																																												
T	□2.4x2.4																																													
TA	□2.8x2.8																																													