

« TACT SWITCH SERIES





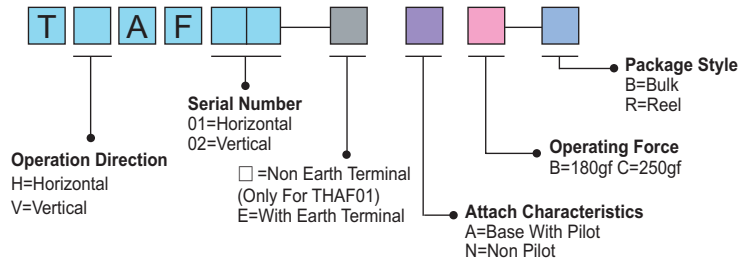
A SERIES

3.0x3.5 Miniature Type Horizontal Push & Vertical Push Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Miniature size 3.5x3mm
- Horizontal and Vertical push type
- Reflow solderable
- Flat terminal

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | 01:B=100,000Cycles C=50,000Cycles 02:B=500,000Cycles C=50,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.15 ± 0.1mm |

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-------------------|-----------------|
| | | PCB Layout |
| 1 | <p>● THAF01-E</p> | |
| 2 | <p>● THAF01</p> | |
| 3 | <p>● TVAF02</p> | |

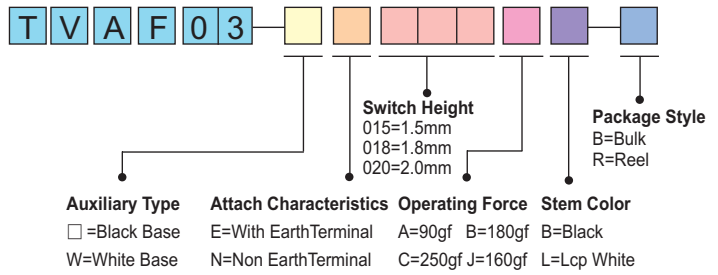


A SERIES

3.3x3.3 Miniature Type Tact Switch



HOW TO ORDER



TACT SWITCH

◆ FEATURES

- Miniature size 3.3x3.3mm
- Reflow solderable
- Contacts sealed structure
- Ground terminal available

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30℃ to +85℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A=500,000Cycles B:300,000Cycles C=100,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf J:160gf |
| | Travel | 0.20 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram PCB Layout |
|-----|-------------------|-------------------------------|
| 1 | <p>● TVAF03-E</p> | |
| 2 | <p>● TVAF03-N</p> | |



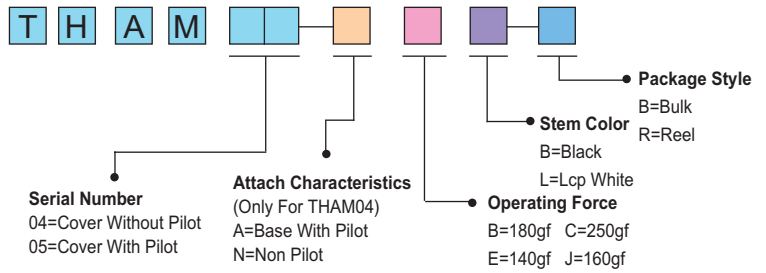
A SERIES

2.3x4.6 Miniature Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Miniature size 4.6x2.3mm
- Horizontal push type
- Reflow solderable
- Fixed pillar available

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B:E=50,000Cycles C=30,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf E:140gf |
| | Travel | 0.2 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● THAM04</p> | |
| 2 | <p>● THAM05</p> | |



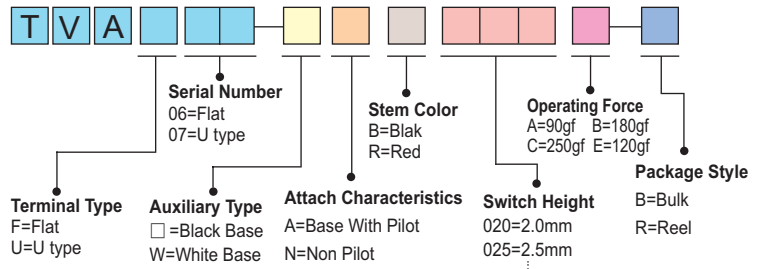
A SERIES

2.9x3.9 Miniature Type Vertical Push Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Compact size 2.9x3.9mm
- Vertical Push type
- Reflow solderable
- Miniature type

◆ APPLICATIONS

- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A=500,000Cycles B:E=300,000Cycles C=100,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf E:120gf |
| | Travel | 0.13 ± 0.05mm |

◆ DIAGRAM

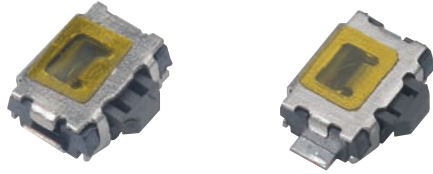
| No. | Dimensions | Circuit Diagram PCB Layout | | | | | |
|-----|---|-------------------------------|-----|-----|-----|-----|--|
| 1 | <p>● TVAF06</p> <table border="1"> <tr><td>H</td></tr> <tr><td>1.5</td></tr> <tr><td>2.0</td></tr> <tr><td>2.5</td></tr> <tr><td>3.0</td></tr> </table> | H | 1.5 | 2.0 | 2.5 | 3.0 | |
| H | | | | | | | |
| 1.5 | | | | | | | |
| 2.0 | | | | | | | |
| 2.5 | | | | | | | |
| 3.0 | | | | | | | |
| 2 | <p>● TVAU07</p> <table border="1"> <tr><td>H</td></tr> <tr><td>1.5</td></tr> <tr><td>2.0</td></tr> <tr><td>2.5</td></tr> <tr><td>3.0</td></tr> </table> | H | 1.5 | 2.0 | 2.5 | 3.0 | |
| H | | | | | | | |
| 1.5 | | | | | | | |
| 2.0 | | | | | | | |
| 2.5 | | | | | | | |
| 3.0 | | | | | | | |



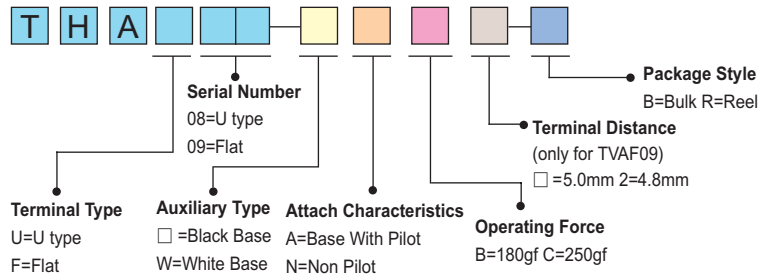
A SERIES

2.9x3.9 Miniature Type Horizontal Push Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Compact size 2.9x3.9mm
- Horizontal Push type
- Reflow solderable
- Miniature type

◆ APPLICATIONS

- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=100,000Cycles C=50,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.20 ± 0.1mm |

◆ DIAGRAM

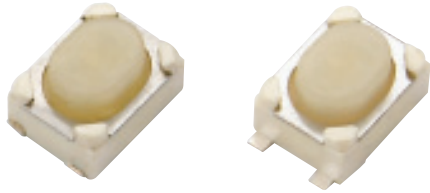
| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● THAU08</p> | |
| 2 | <p>● THAF09</p> | |



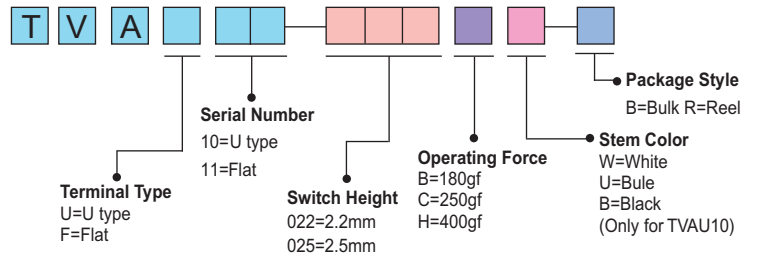
A SERIES

3.2x4.2 Miniature Type Compact High Operating Force Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Compact size 3.2x4.2mm
- Vertical Push type
- High operating force
- Miniature type

◆ APPLICATIONS

- Remote keyless entry
- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 500mΩ max. |
| Durability | Lifetime | B=300,000Cycles C=100,000Cycles H=50,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf H:400gf |
| | Travel | 0.20 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVAU10</p> | |
| 2 | <p>● TVAF11</p> | |



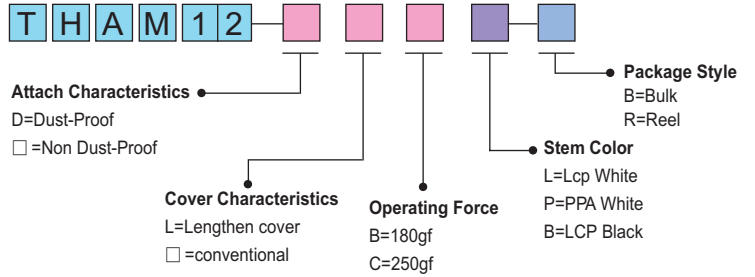
A SERIES

2.56x4.5 Miniature Type Horizontal Push Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Miniature 4.5x2.56mm size
- Horizontal push type
- Reflow solderable
- Longer cover available

◆ APPLICATIONS

- Remote keyless entry
- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 500mΩ max. |
| Durability | Lifetime | B=300,000Cycles C=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.20 ± 0.1mm |

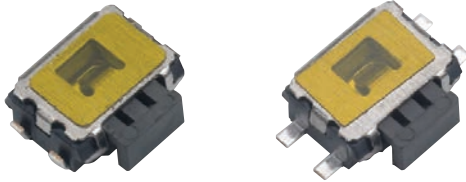
◆ DIAGRAM

| No. | Dimensions | Circuit Diagram PCB Layout |
|-----|---------------------|-------------------------------|
| 1 | <p>● THAM12</p> | |
| 2 | <p>● THAM12-□ L</p> | |

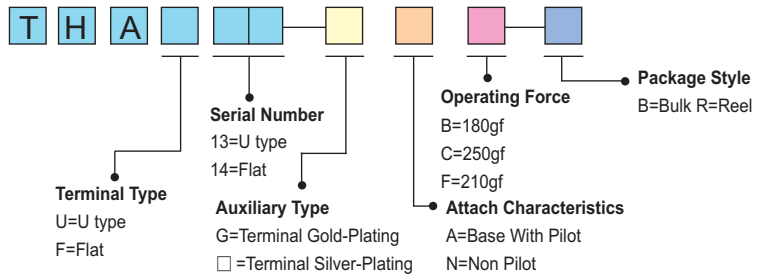


A SERIES

3.5x4.7 Horizontal Push Tact Switch



HOW TO ORDER



TACT SWITCH

◆ FEATURES

- Compact size 3.5x4.7mm for high density mounting
- Horizontal Push type
- Reflow solderable
- Miniature type

◆ APPLICATIONS

- Remote keyless entry
- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=100,000Cycles C=50,000Cycles F=50,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf F:210gf |
| | Travel | 0.30 ± 0.1mm |

◆ DIAGRAM

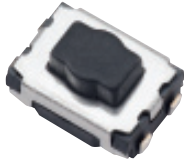
| No. | Dimensions | Circuit Diagram PCB Layout |
|-----|-----------------|-------------------------------|
| 1 | <p>● THAU13</p> | |
| 2 | <p>● THAF14</p> | |



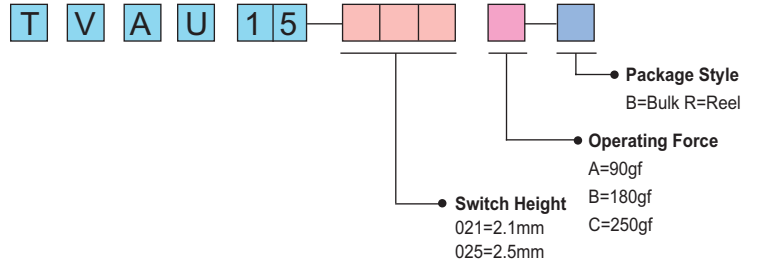
A SERIES

3.5x4.7 Miniature Type With Ground Terminal Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Miniature compact size 3.5x4.7mm
- With ground terminal
- Reflow solderable
- 4 pins improve solderability

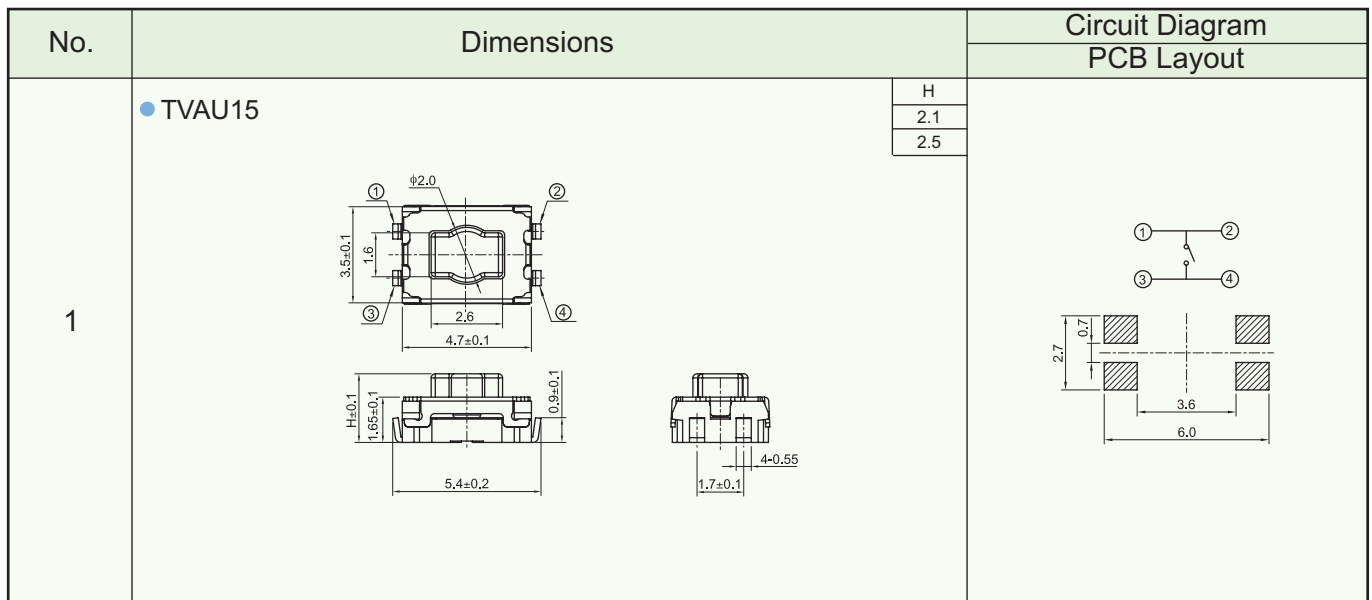
◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A=500,000Cycles B=300,000Cycles C=100,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM





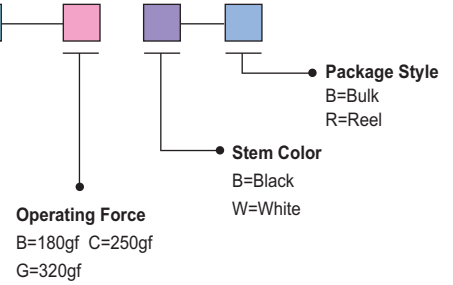
A SERIES

2.6x6.1 Miniature Type Horizontal Push Tact Switch



HOW TO ORDER

T H A M 1 6



TACT SWITCH

◆ FEATURES

- Miniature compact size 3.5x4.7mm
- Horizontal push type
- Reflow solderable
- 4 pins improve solderability

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|----------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=100,000Cycles C:G=50,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf G:320gf |
| | Travel | 0.25 ± 0.1mm |

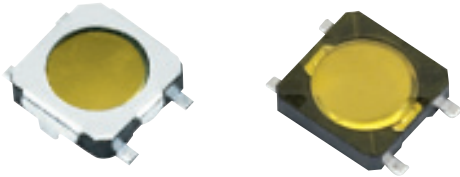
◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|--|---|
| | | PCB Layout |
| 1 | <p>● THAM16</p> <p>Top view dimensions: 6.1±0.1, 2.6, 3.5±0.1, 1.35, 4.8±0.1, 1.6, 4.5±0.1, 2-0.8, 2.1±0.1, 1.6±0.1, 2.6±0.1, 1.6±0.1, 2.1±0.1</p> | <p>Circuit diagram shows a switch between terminals ① and ②.</p> <p>PCB layout shows a 4.5±0.05 wide pad with a 1.2 wide pad and a 1.35 high pad.</p> |

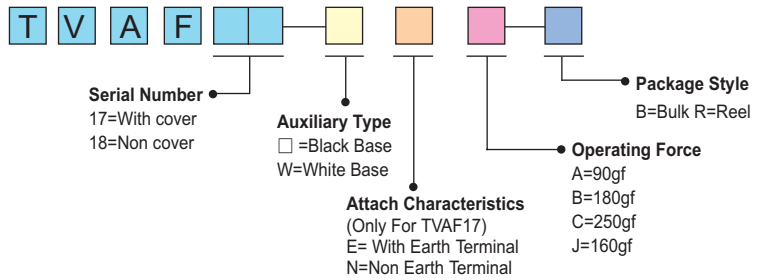
A SERIES

3.3x3.3 Miniature Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Vertical Push type
- Reflow solderable
- Miniature size 0.85mm height
- Ground terminal available

◆ APPLICATIONS

- Smartphones, tablets
- Headsets, wearables
- Notebooks, peripherals

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA, 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A=500,000Cycles B:J=300,000Cycles C=100,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf J:160gf |
| | Travel | 0.20 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVAF17</p> | |
| 2 | <p>● TVAF18</p> | |

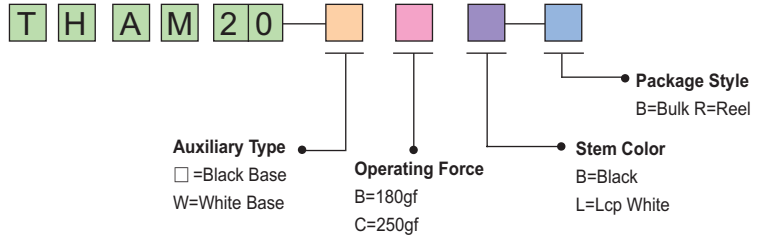
A SERIES

2.0x4.0 Dust-proof Miniature Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Miniature size 2x4mm
- Dustproof sealed structure
- Reflow solderable
- Vertical push type

◆ APPLICATIONS

- Smartphones, tablets
- Headsets, wearables
- Notebooks, peripherals

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-------------------------------|
| Operating temperature range | | -30℃ to +85℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=50,000Cycles C=30,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.15 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● THAM20</p> | |



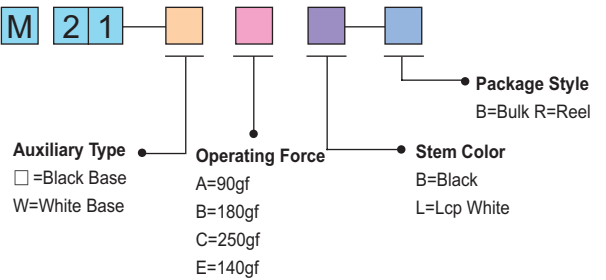
A SERIES

2.4x4.6 Dust-Proof Miniature Type Tact Switch



HOW TO ORDER

T H A M 2 1



TACT SWITCH

◆ FEATURES

- Miniature size 2.4x4.6mm
- Dustproof sealed structure
- Reflow solderable
- Vertical push type

◆ APPLICATIONS

- Smartphones, tablets
- Headsets, wearables
- Notebooks, peripherals

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-------------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B:E=100,000Cycles C=30,000 Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf E:140gf |
| | Travel | 0.15 ± 0.1mm |

◆ DIAGRAM

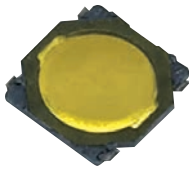
| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● THAM21</p> | |



A SERIES

3.7x3.7 Miniature Type Tact Switch

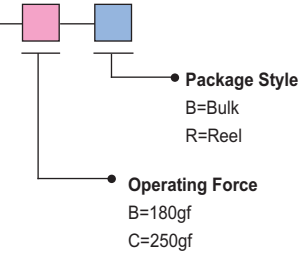
TACT SWITCH



New

HOW TO ORDER

T V A U 2 2



◆ FEATURES

- Compact size 3.7x3.7mm
- Vertical Push type
- Reflow solderable
- Low profile of 0.35mm height

◆ APPLICATIONS

- Smartphones, tablets
- Headsets, wearables
- Notebooks, peripherals

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=1,000,000Cycles C=500,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.15 ± 0.05 |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|--|---|
| | | PCB Layout |
| 1 | <p>● TVAU22</p> <p> Top View Dimensions: Overall width: 3.7±0.1 Overall height: 4.0±0.05 Inner width: 3.1±0.1 Inner height: 2.75±0.1 Pad diameter: 0.25 Pad thickness: 0.05 Pad height: 0.35 Pad width: 3.4±0.1 </p> | <p> Circuit Diagram: Shows a switch between terminals 1 and 2, and 3 and 4. PCB Layout: Shows the component footprint with dimensions: 2.0±0.1 (width), 3.8±0.1 (length), 0.6 (height), and 2.75±0.05 (total height). </p> |

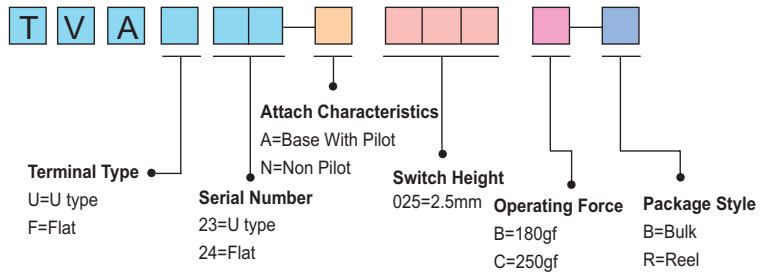
A SERIES

3.5x4.7 Vertical Push Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Surface mount gull-wing terminal
- Reflow solderable
- Multiple operating force and button height
- Excellent tactile feedback

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---------------------------------|
| Operating temperature range | | -30℃ to +85℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=300,000Cycles C=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram PCB Layout |
|-----|-----------------|-------------------------------|
| 1 | <p>● TVAU23</p> | |
| 2 | <p>● TVAF24</p> | |



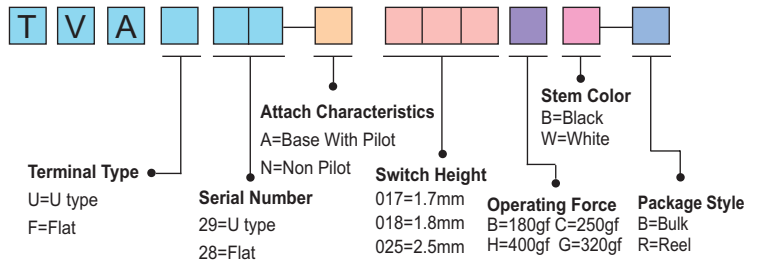
A SERIES

3.5x4.7 Vertical Push Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Miniature size 2.5x3.5mm
- Horizontal and Vertical push type
- Long lifetime

◆ APPLICATIONS

- Smartphones, tablets
- Headsets, wearables
- Notebooks, peripherals

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | J=300,000Cycles C=100,000Cycles G:H=50,000Cycles |
| Mechanical performance | Operating force | J:160gf C:250gf G:320gf H:400gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVAF28</p> | |
| 2 | <p>● TVAU29</p> | |



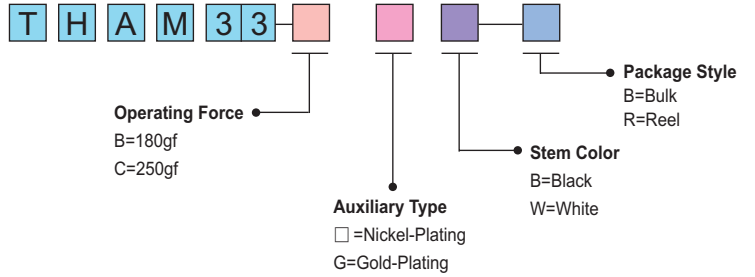
A SERIES

4.5x2.2 Side Push Tact Switch



New

HOW TO ORDER



TACT SWITCH

◆ FEATURES

- Miniature size 4.5x2.2mm
- Side push mid-mount type
- Long lifetime of 600,000 Cycles

◆ APPLICATIONS

- Smartphones, tablets
- Headsets, wearables
- Notebooks, peripherals

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-------------------------------|
| Operating temperature range | | -30℃ to +85℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=50,000Cycles C=30,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.15 ± 0.2mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram PCB Layout |
|-----|-----------------|-------------------------------|
| 1 | <p>● THAM33</p> | |

A SERIES

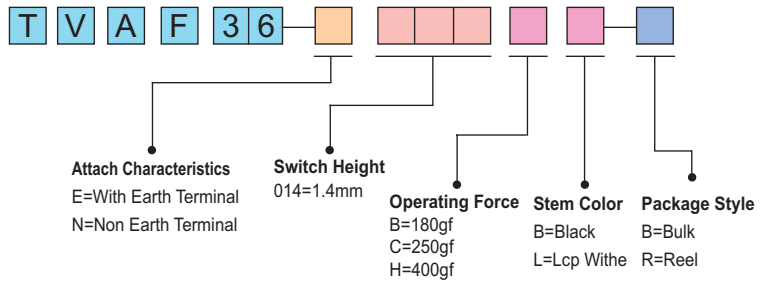
3.0x2.75 Vertical Push Tact Switch

TACT SWITCH



New

HOW TO ORDER



◆ FEATURES

- High operating force
- ground terminal available
- 2.75x3mm vertical push

◆ APPLICATIONS

- Remote keyless entry
- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=200,000Cycles C=100,000Cycles H=50,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf H:400gf |
| | Travel | 0.12 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-------------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVAF36-E</p> | |
| 2 | <p>● TVAF36</p> | |



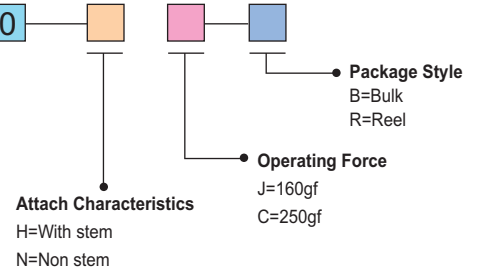
A SERIES

2.0x3.0 Miniature Type Vertical Push Tact Switch



HOW TO ORDER

T V A F 4 0



TACT SWITCH

◆ FEATURES

- Compact size 3x2mm
- Vertical Push type
- Low profile of 0.6mm height
- Long lifetime

◆ APPLICATIONS

- Smartphones, tablets
- Headsets, wearables
- Notebooks, peripherals

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 20mA. 15V DC |
| | Insulation resistance | 50MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 500mΩ max. |
| Durability | Lifetime | J=500,000Cycles C=300,000Cycles |
| Mechanical performance | Operating force | J:160gf C:250gf |
| | Travel | 0.13 ± 0.05mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-------------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVAF40-H</p> | |



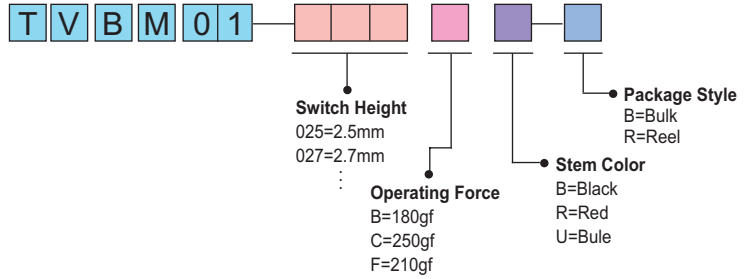
B SERIES

3.7x6.3 SMT & Soft Feeling Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Compact size 3.7x6.3mm
- Low profile of 2.5mm height
- Contacts sealed structure
- Reflow solderable
- Rubber button with Soft feeling

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=300,000Cycles C:F=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf F:210gf |
| | Travel | 0.30 ± 0.2mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVBM01</p> | |

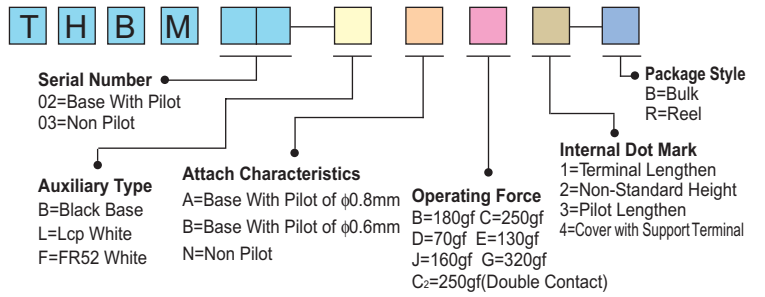


B SERIES

2.5x7.0 SMT & Right Angle Tact Switch



HOW TO ORDER



TACT SWITCH

◆ FEATURES

- Miniature size 7x2.5mm
- Horizontal push type
- Reflow solderable
- Fixed pillar available
- Longer cover available

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

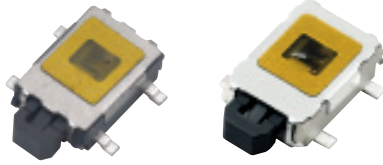
| Items | | Standard |
|-----------------------------|-----------------------|--|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100M Ω min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100m Ω max. |
| Durability | Lifetime | D:E:B:J=100,000Cycles C:G=50,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf D:70gf E:130gf J:160gf G:320gf |
| | Travel | 0.25 \pm 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram PCB Layout |
|-----|--|-------------------------------|
| 1 | <p>● THBM02</p> <p>A $\phi 0.6$ $\phi 0.8$</p> | |
| 2 | <p>● THBM02-□□□4</p> | |
| 3 | <p>● THBM03</p> | |

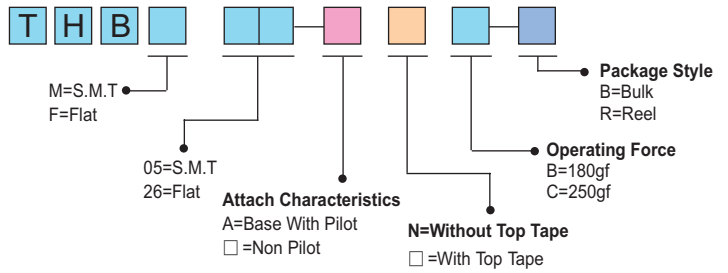
B SERIES

4.0x6.1 Horizontal Push Tact Switch



New

HOW TO ORDER



◆ FEATURES

- Compact size 4x4.7mm for high density mounting
- Horizontal Push type
- Reflow solderable
- Contacts sealed structure for high reliability

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=200,000Cycles C=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.30 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● THBM05</p> | |
| 2 | <p>● THBF26</p> | |



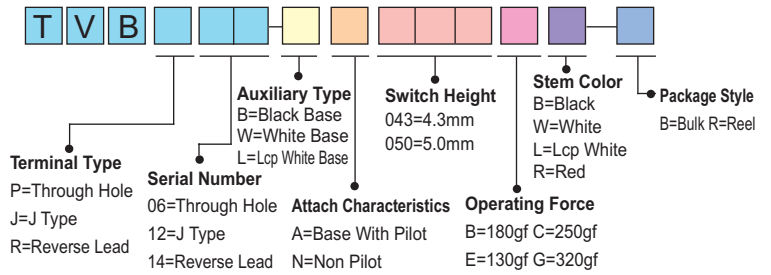
B SERIES

3.5x6.0 Vertical Push Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- 6x3.5mm for high density mounting
- Snap-in type
- Vertical push type

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|------------------------------------|
| Operating temperature range | | -20°C to +70°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B:D:E=100,000Cycles C=50,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf D:70gf E:130gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram | | | |
|-----|---|-----------------|-----|-----|--|
| | | PCB Layout | | | |
| 1 | <p>● TVBP06</p> <table border="1"> <tr><td>H</td></tr> <tr><td>4.3</td></tr> <tr><td>5.0</td></tr> </table> | H | 4.3 | 5.0 | |
| H | | | | | |
| 4.3 | | | | | |
| 5.0 | | | | | |
| 2 | <p>● TVBJ12</p> <table border="1"> <tr><td>H</td></tr> <tr><td>4.3</td></tr> <tr><td>5.0</td></tr> </table> | H | 4.3 | 5.0 | |
| H | | | | | |
| 4.3 | | | | | |
| 5.0 | | | | | |
| 3 | <p>● TVBR14</p> <table border="1"> <tr><td>H</td></tr> <tr><td>4.3</td></tr> <tr><td>5.0</td></tr> </table> | H | 4.3 | 5.0 | |
| H | | | | | |
| 4.3 | | | | | |
| 5.0 | | | | | |



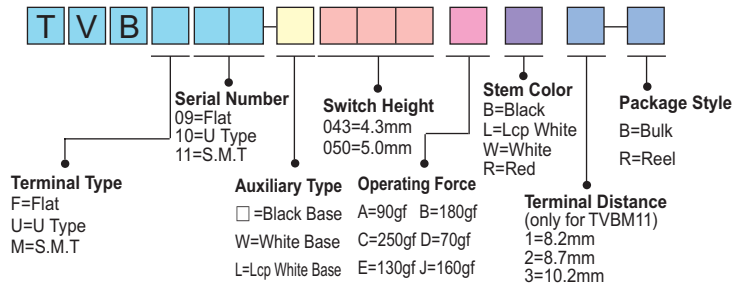
B SERIES

3.5x6.0 Vertical Push Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Compact size 3.5x6mm for high density mounting
- Vertical Push type
- Reflow solderable
- Sharp click feeling

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -20°C to +70°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B:D:E=100,000Cycles C:G=50,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf D:70gf E:130gf G:320gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram | | | | | | | |
|------|--|-----------------|-----|-----|---|-----|-----|------|--|
| | | PCB Layout | | | | | | | |
| 1 | <p>● TVBF09</p> <table border="1"> <tr><td>H</td></tr> <tr><td>4.3</td></tr> <tr><td>5.0</td></tr> </table> | H | 4.3 | 5.0 | | | | | |
| H | | | | | | | | | |
| 4.3 | | | | | | | | | |
| 5.0 | | | | | | | | | |
| 2 | <p>● TVBU10</p> <table border="1"> <tr><td>H</td></tr> <tr><td>4.3</td></tr> <tr><td>5.0</td></tr> </table> | H | 4.3 | 5.0 | | | | | |
| H | | | | | | | | | |
| 4.3 | | | | | | | | | |
| 5.0 | | | | | | | | | |
| 3 | <p>● TVBM11</p> <table border="1"> <tr><td>H</td></tr> <tr><td>4.3</td></tr> <tr><td>5.0</td></tr> <tr><td>A</td></tr> <tr><td>8.2</td></tr> <tr><td>8.7</td></tr> <tr><td>10.2</td></tr> </table> | H | 4.3 | 5.0 | A | 8.2 | 8.7 | 10.2 | |
| H | | | | | | | | | |
| 4.3 | | | | | | | | | |
| 5.0 | | | | | | | | | |
| A | | | | | | | | | |
| 8.2 | | | | | | | | | |
| 8.7 | | | | | | | | | |
| 10.2 | | | | | | | | | |



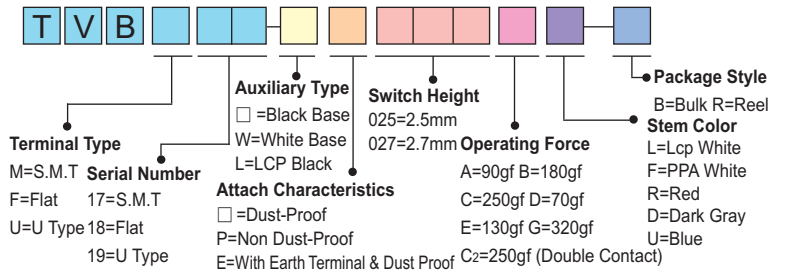
B SERIES

3.7x6.1 SMT Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Low profile of 2.5mm height
- Compact size 3.7x6mm for high density mounting
- Vertical Push type
- Anti-ESD ground terminal available

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

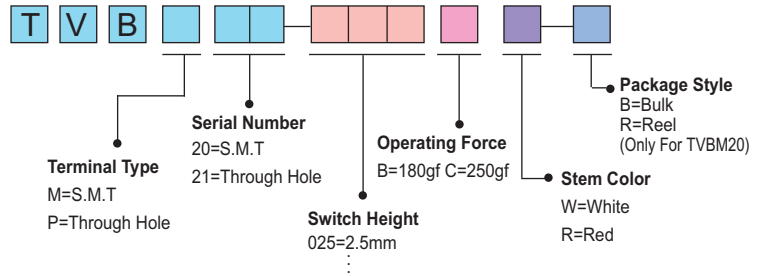
| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B:D:E=100,000Cycles C:G:50,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf D:70gf E:130gf G:320gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram | | | | |
|-----|------------|---|---|-----|-----|--|
| | | PCB Layout | | | | |
| 1 | | <table border="1"> <tr><td>H</td></tr> <tr><td>2.5</td></tr> <tr><td>2.7</td></tr> </table> | H | 2.5 | 2.7 | |
| H | | | | | | |
| 2.5 | | | | | | |
| 2.7 | | | | | | |
| 2 | | <table border="1"> <tr><td>H</td></tr> <tr><td>2.5</td></tr> <tr><td>2.7</td></tr> </table> | H | 2.5 | 2.7 | |
| H | | | | | | |
| 2.5 | | | | | | |
| 2.7 | | | | | | |
| 3 | | <table border="1"> <tr><td>H</td></tr> <tr><td>2.5</td></tr> <tr><td>2.7</td></tr> </table> | H | 2.5 | 2.7 | |
| H | | | | | | |
| 2.5 | | | | | | |
| 2.7 | | | | | | |



HOW TO ORDER



◆ FEATURES

- 6.1x3.5mm for high density mounting
- Snap-in type
- Vertical push type

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=100,000Cycles C=50,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

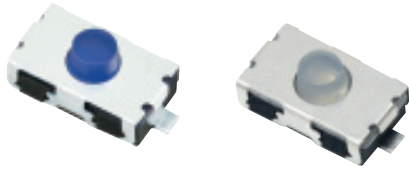
◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVBM20</p> | |
| 2 | <p>● TVBP21</p> | |

B SERIES

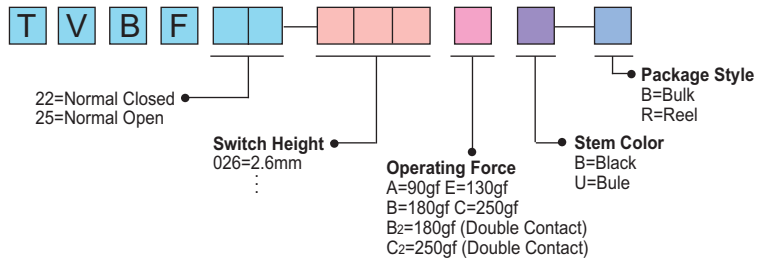
3.8x6.0 Subminiature Tact Switch for SMT

TACT SWITCH



New

HOW TO ORDER



◆ FEATURES

- Rubber button with soft touch feeling
- Normally closed and normally open type
- Dustproof contacts sealed structure
- Reflow solderable

◆ APPLICATIONS

- Healthcare equipment
- Care (wheelchairs, beds) Analysis, test equipment
- Medical equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|------------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:E:B=100,000Cycles C=50,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf |
| | Travel | 0.3 ± 0.1mm |

◆ DIAGRAM

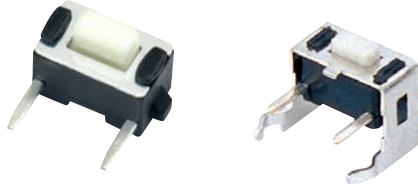
| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVBF22</p> | |
| 2 | <p>● TVBF25</p> | |



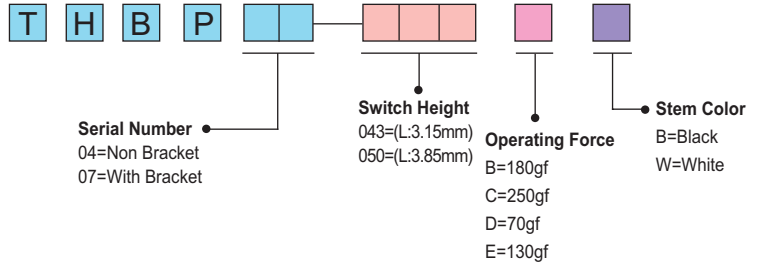
B SERIES

3.5x6.0 Horizontal Push & Bracket Shape Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- For high density mounting
- Snap-in type
- Horizontal push type
- Bracket available

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|------------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B:D:E=100,000Cycles C=50,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf D:70gf E:130gf |
| | Travel | 0.25 ± 0.1mm |

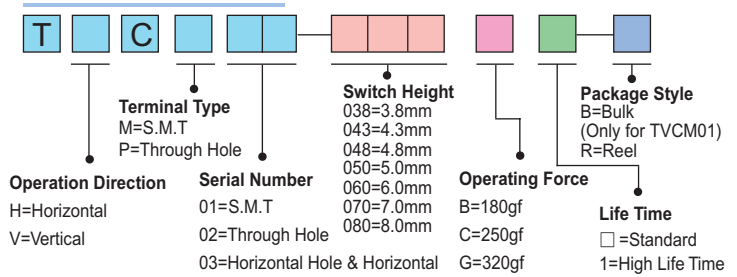
◆ DIAGRAM

| No. | Dimensions | Circuit Diagram PCB Layout |
|-----|-----------------|-------------------------------|
| 1 | <p>● THBP04</p> | |
| 2 | <p>● THBP07</p> | |

C SERIES

4.5x4.5 Through Hole & SMT Type Tact Switch

TACT SWITCH



◆ FEATURES

- Surface mounting type
- Compact size 4.5x4.5mm for high density mounting
- Partial output terminal can be used as jumper pin

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=300,000Cycles C=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.2 ± 0.1mm |

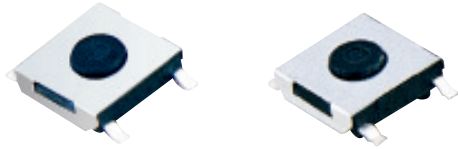
◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVCM01</p> | |
| 2 | <p>● TVCP02</p> | |
| 3 | <p>● THCP03</p> | |

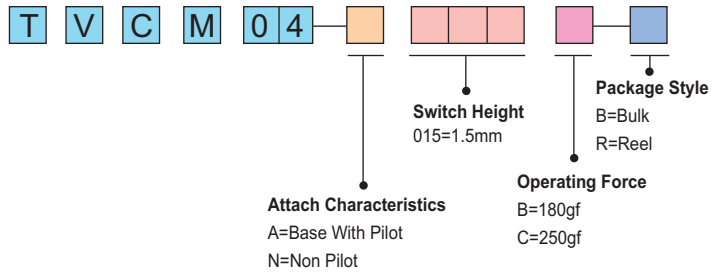
C SERIES

4.3x4.5 SMT Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Surface mounting type
- Compact size 4.3x4.5mm for high density mounting
- Contacts sealed structure
- Reflow solderable
- Low profile of 1.6mm height

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B:C=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.2 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-------------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVCM04-A</p> | |
| 2 | <p>● TVCM04-N</p> | |



C SERIES

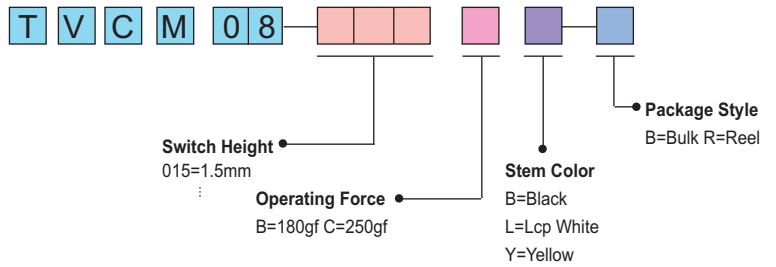
4.5x4.5 SMT Type Tact Switch

TACT SWITCH



New

HOW TO ORDER



◆ FEATURES

- Compact size 5.2x5.2mm for high density mounting
- Vertical Push type
- Reflow solderable
- Low profile of 0.8mm or 1.5mm height
- Contacts sealed structure for high reliability

◆ APPLICATIONS

- Visual
- Audio
- Pro audio
- Camera

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -30 °C to +85 °C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=1,000,000Cycles C=500,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.15 ± 0.1mm |

◆ DIAGRAM

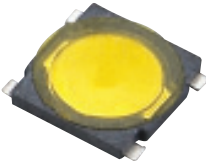
| No. | Dimensions | Circuit Diagram |
|-----|--------------|-----------------|
| | | PCB Layout |
| 1 | ● TVCM08 | |



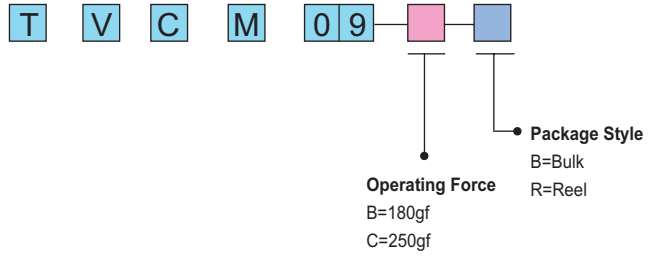
C SERIES

4.5x4.5 Low-profile SMT Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Compact size 5.2x5.2mm for high density mounting
- Vertical Push type
- Reflow solderable
- Low profile of 0.8mm or 1.5mm height
- Contacts sealed structure for high reliability

◆ APPLICATIONS

- Visual
- Audio
- Pro audio
- Camera

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -30℃ to +85℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 100V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=1,000,000Cycles C=500,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.15 ± 0.1mm |

◆ DIAGRAM

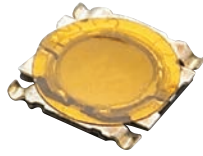
| No. | Dimensions | Circuit Diagram |
|-----|------------------|-----------------|
| | | PCB Layout |
| 1 | ● TVCM09 | |



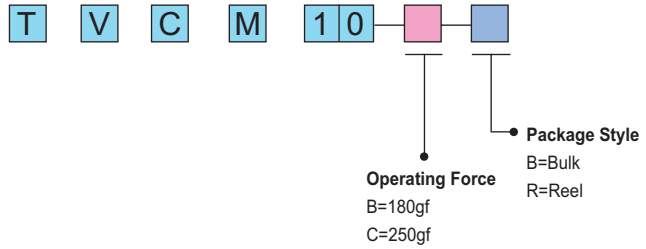
C SERIES

4.5x4.5 Low-profile SMT Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Compact size 5.2x5.2mm for high density mounting
- Vertical Push type
- Reflow solderable
- Low profile of 0.8mm or 1.5mm height
- Contacts sealed structure for high reliability

◆ APPLICATIONS

- Visual
- Audio
- Pro audio
- Camera

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -30 °C to +85 °C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 100V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=1,000,000Cycles C=500,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.15 ± 0.1mm |

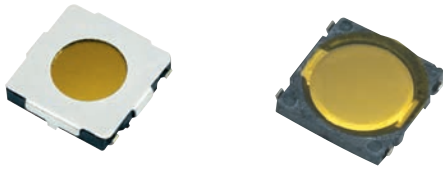
◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|--------------|-----------------|
| | | PCB Layout |
| 1 | ● TVCM10 | |

C SERIES

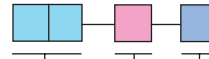
5.2mm Square Low-Profile Type

TACT SWITCH



HOW TO ORDER

T V C U



Serial Number
11=With Cover
12=Non Cover

Operating Force
A=90gf B=180gf
C=250gf D=70gf
E=130gf G=320gf

Package Style
B=Bulk R=Reel

◆ FEATURES

- Compact size 5.2x5.2mm for high density mounting
- Vertical Push type
- Reflow solderable
- Low profile of 0.8mm or 1.5mm height
- Long lifetime
- With ground terminal

◆ APPLICATIONS

- Smartphones, tablets
- Headsets, wearables
- Notebooks, peripherals

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 100V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B:D:E=1,000,000Cycles C:G=500,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf D:70gf E:130gf G:320gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

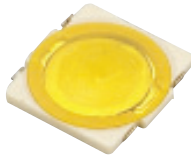
| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVCU11</p> | |
| 2 | <p>● TVCU12</p> | |



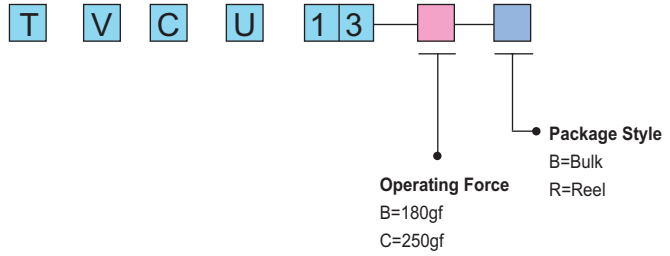
C SERIES

4.8x4.8 Low-profile SMT Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Compact size 4.8x4.8mm for high density mounting
- Vertical Push type
- Reflow solderable
- Low profile of 0.55mm height
- Dustproof sealed structure for high reliability

◆ APPLICATIONS

- Remote keyless entry
- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -30 °C to +85 °C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 100V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=1,000,000Cycles C=500,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.20 ± 0.05mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVCU13</p> | |



C SERIES

5.2x5.2 SMT Tact Switch

TACT SWITCH



HOW TO ORDER

T V C M 1 5

Auxiliary Type
 □ =Black Base
 W=White Base
 L=LCP Black Base

Switch Height
 010=1.0mm(With Cover)
 008=0.8mm(Non Cover)

Operating Force
 A=90gf B=180gf
 C=250gf D=70gf
 E=130gf G=320gf

Package Style
 B=Bulk
 R=Reel

◆ FEATURES

- Compact size 5.2x5.2mm for high density mounting
- Vertical Push type
- Reflow solderable
- Low profile of 0.8mm height
- Contacts sealed structure for high reliability

◆ APPLICATIONS

- Remote keyless entry
- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30℃ to +85℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B:D:E=1,000,000Cycles C:G=500,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf D:70gf E:130gf G:320gf |
| | Travel | 0.25 ± 0.1mm |

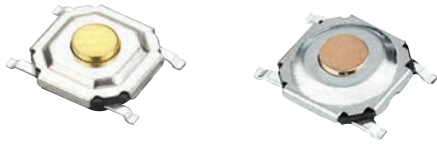
◆ DIAGRAM

| No. | Dimensions | Circuit Diagram PCB Layout |
|---------------------|------------|-------------------------------|
| | | <p>● TVCM15-010</p> |
| <p>● TVCM15-008</p> | | |

C SERIES

5.2x5.2 SMT Tact Switch

TACT SWITCH



HOW TO ORDER

| | | | | | | | | | |
|---|---|---|---|---------------------------------------|---|--|---|--|--|
| T | V | C | M | | | | | | |
| Serial Number 16=Square Cover 17=Round Cover | Auxiliary Type □=Black Base W=White Base L=Lcp Black Base | Switch Height 015=1.5mm 016=1.6mm 017=1.7mm 020=2.0mm 025=2.5mm 035=3.5mm 043=4.3mm | Stem Color L=Lcp White F=PPA White B=Black Y=Yellow P=Nickel Plating | Package Style B=Bulk R=Reel | Attach Characteristics □=Dust-Proof P=Non Dust-Proof E=With Earth Terminal & Dust-Proof | Operating Force A=90gf B=180gf C=250gf D=70gf E=130gf G=320gf H=400gf I=520gf | Internal Dot Mark □=Standard 1=High Life Time 2=Terminal of 6.0mm | | |

◆ FEATURES

- Compact size 5.2x5.2mm for high density mounting
- Vertical Push type
- Reflow solderable
- Low profile
- Contacts sealed structure

◆ APPLICATIONS

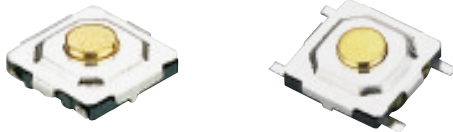
- Remote keyless entry
- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

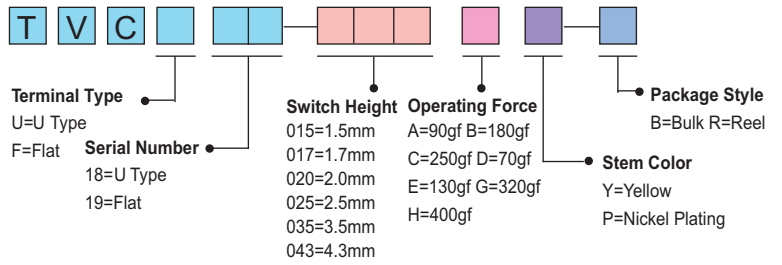
| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B:D:E=1,000,000Cycles C:G=500,000Cycles H:I=300,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf D:70gf E:130gf G:320gf H:400gf I:520gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram PCB Layout |
|-----|-----------------|-------------------------------|
| 1 | <p>● TVCM16</p> | |
| 2 | <p>● TVCM17</p> | |



HOW TO ORDER



◆ FEATURES

- Compact size 5.2x5.2mm for high density mounting
- Vertical Push type
- Reflow solderable
- Low profile of 1.5mm height
- Long lifetime
- With ground terminal

◆ APPLICATIONS

- Remote keyless entry
- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B:D:E=1,000,000Cycles C:G=500,000Cycles H=300,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf D:70gf E:130gf G:320gf H:400gf |
| | Travel | 0.25 ± 0.1mm |

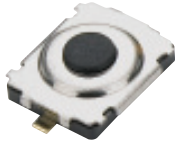
◆ DIAGRAM

| No. | Dimensions | Circuit Diagram PCB Layout |
|-----|-----------------|-------------------------------|
| 1 | <p>● TVCU18</p> | |
| 2 | <p>● TVCF19</p> | |

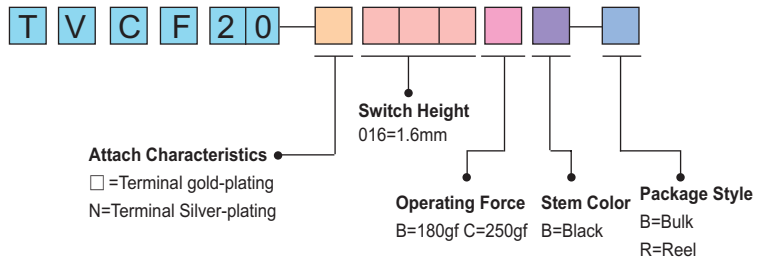
C SERIES

5.0x6.2 Normal Closed Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Low profile of 1.6mm height
- Reflow solderable
- 5x6.2mm size
- Normally closed type

◆ APPLICATIONS

- Remote keyless entry
- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

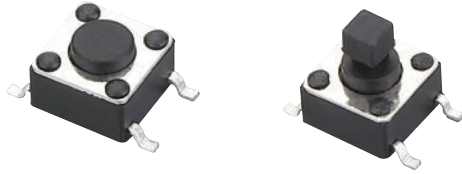
| Items | | Standard |
|-----------------------------|-----------------------|--------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=100,000Cycles C=50,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVCF20</p> | |

D SERIES

6.0x6.0 Surface Mounting Tact Switch



HOW TO ORDER

TVDM04

| | | | | |
|--------------------------------|---|---|---|---|
| Terminal Type | Switch Height | Operating Force | Stem Color | Internal Dot Mark |
| A=8.2mm B=9.2mm C=10.2mm | 043=4.3mm 050=5.0mm 055=5.5mm 060=6.0mm 065=6.5mm 070=7.0mm G73=7.3mm | A=90gf B=180gf C=250gf D=70gf E=130gf J=160gf G=320gf H=400gf I=520gf | B=Black W=White R=Red D=Dark Gray N=Brown | □ =Standard Lifetime 1=High Lifetime 2=Brass Cover 3=High Lifetime & Brass Cover 4=PET Cover 5=High Lifetime & PET Cover |

Package Style
B=Bulk R=Reel

◆ FEATURES

- 6x6mm, surface mounting type
- Ground pin available
- Reflow solderable

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -40°C to +90°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B:D:E:J=1,000,000Cycles C:G=500,000Cycles H:I=300,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf D:70gf E:130gf G:320gf H:400gf I:520gf J:160gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

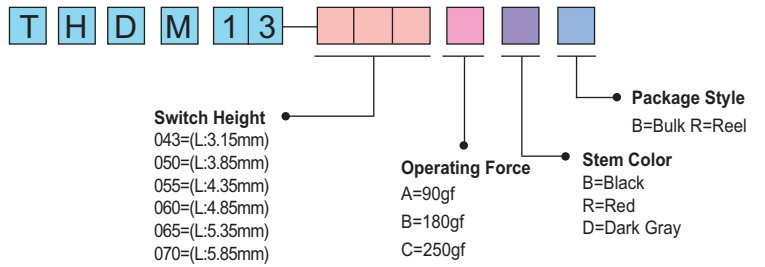
| No. | Dimensions | Circuit Diagram | | | | | | | | | | | | | | |
|-----|---|-----------------|---|-----|-----|---|-----|---|-----|-----|---|----|---|----|---|--|
| | | PCB Layout | | | | | | | | | | | | | | |
| 1 | <p>● TVDM04</p> <table border="1"> <tr><th>H</th><th>A</th></tr> <tr><td>4.3</td><td>3.5</td></tr> <tr><td>5</td><td>3.5</td></tr> <tr><td>7</td><td>3.3</td></tr> <tr><td>9.5</td><td>3</td></tr> <tr><td>13</td><td>3</td></tr> <tr><td>17</td><td>3</td></tr> </table> | H | A | 4.3 | 3.5 | 5 | 3.5 | 7 | 3.3 | 9.5 | 3 | 13 | 3 | 17 | 3 | |
| H | A | | | | | | | | | | | | | | | |
| 4.3 | 3.5 | | | | | | | | | | | | | | | |
| 5 | 3.5 | | | | | | | | | | | | | | | |
| 7 | 3.3 | | | | | | | | | | | | | | | |
| 9.5 | 3 | | | | | | | | | | | | | | | |
| 13 | 3 | | | | | | | | | | | | | | | |
| 17 | 3 | | | | | | | | | | | | | | | |
| 2 | <p>● TVDM04-G73</p> | | | | | | | | | | | | | | | |

D SERIES

6.0x6.0 SMT & Bracket Shape Type Tact Switch



HOW TO ORDER



◆ FEATURES

- 6x6mm Snap-in type
- Anti-ESD ground pin available
- Horizontal push type
- Multiple button length

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -40℃ to +90℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A=1,000,000Cycles B=500,000Cycles C=300,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram | | | | | | | | | | | | | | |
|------|--|-----------------|---|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|--|
| | | PCB Layout | | | | | | | | | | | | | | |
| 1 | <p>● THDM13</p> <table border="1"> <thead> <tr> <th>L</th> <th>A</th> </tr> </thead> <tbody> <tr> <td>3.15</td> <td>3.5</td> </tr> <tr> <td>3.85</td> <td>3.5</td> </tr> <tr> <td>4.35</td> <td>3.3</td> </tr> <tr> <td>4.85</td> <td>3.3</td> </tr> <tr> <td>5.35</td> <td>3.3</td> </tr> <tr> <td>5.85</td> <td>3.3</td> </tr> </tbody> </table> | L | A | 3.15 | 3.5 | 3.85 | 3.5 | 4.35 | 3.3 | 4.85 | 3.3 | 5.35 | 3.3 | 5.85 | 3.3 | |
| L | A | | | | | | | | | | | | | | | |
| 3.15 | 3.5 | | | | | | | | | | | | | | | |
| 3.85 | 3.5 | | | | | | | | | | | | | | | |
| 4.35 | 3.3 | | | | | | | | | | | | | | | |
| 4.85 | 3.3 | | | | | | | | | | | | | | | |
| 5.35 | 3.3 | | | | | | | | | | | | | | | |
| 5.85 | 3.3 | | | | | | | | | | | | | | | |

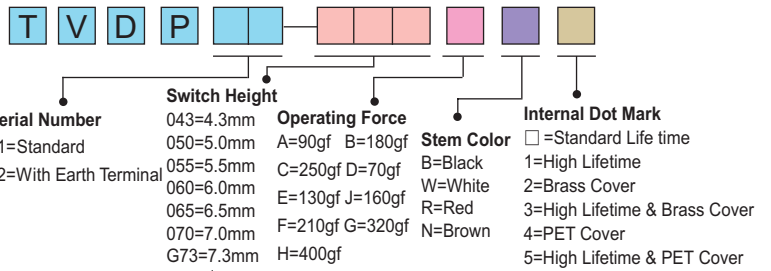
D SERIES

6.0x6.0 Through Hole Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Compact size 6x6mm
- Sharp tactile feeling
- Cap available
- Snap-in type
- Partial output terminal can be used as jumper pin
- With anti-ESD ground pin

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -40°C to +90°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B:D:E:J:F=1,000,000Cycles C:G=500,000Cycles H=300,000Cycles |
| Mechanical performance | Operating force | A:90gf D:70gf B:180gf E:130gf J:160gf F:210gf G:320gf H:400gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram | | | | | | | | | | | | | | |
|-----|--|-----------------|---|-----|-----|---|-----|---|-----|-----|---|----|---|----|---|--|
| | | PCB Layout | | | | | | | | | | | | | | |
| 1 | <table border="1"> <thead> <tr> <th>H</th> <th>A</th> </tr> </thead> <tbody> <tr><td>4.3</td><td>3.5</td></tr> <tr><td>5</td><td>3.5</td></tr> <tr><td>7</td><td>3.3</td></tr> <tr><td>9.5</td><td>3</td></tr> <tr><td>13</td><td>3</td></tr> <tr><td>17</td><td>3</td></tr> </tbody> </table> | H | A | 4.3 | 3.5 | 5 | 3.5 | 7 | 3.3 | 9.5 | 3 | 13 | 3 | 17 | 3 | |
| H | A | | | | | | | | | | | | | | | |
| 4.3 | 3.5 | | | | | | | | | | | | | | | |
| 5 | 3.5 | | | | | | | | | | | | | | | |
| 7 | 3.3 | | | | | | | | | | | | | | | |
| 9.5 | 3 | | | | | | | | | | | | | | | |
| 13 | 3 | | | | | | | | | | | | | | | |
| 17 | 3 | | | | | | | | | | | | | | | |
| 2 | <table border="1"> <thead> <tr> <th>H</th> <th>A</th> </tr> </thead> <tbody> <tr><td>4.3</td><td>3.5</td></tr> <tr><td>5</td><td>3.5</td></tr> <tr><td>7</td><td>3.3</td></tr> <tr><td>9.5</td><td>3</td></tr> </tbody> </table> | H | A | 4.3 | 3.5 | 5 | 3.5 | 7 | 3.3 | 9.5 | 3 | | | | | |
| H | A | | | | | | | | | | | | | | | |
| 4.3 | 3.5 | | | | | | | | | | | | | | | |
| 5 | 3.5 | | | | | | | | | | | | | | | |
| 7 | 3.3 | | | | | | | | | | | | | | | |
| 9.5 | 3 | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | |



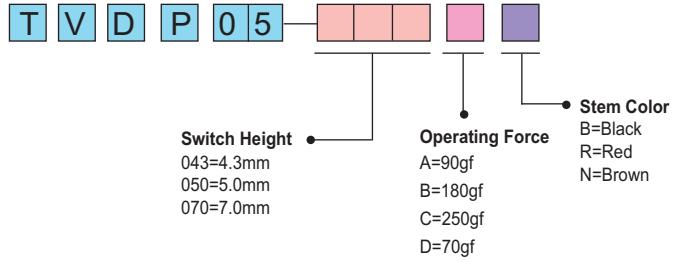
D SERIES

6.0x6.0 Other Terminal Shape Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Compact size 6x6mm
- Snap-in type
- Vertical push type
- Partial output terminal can be used as jumper pin

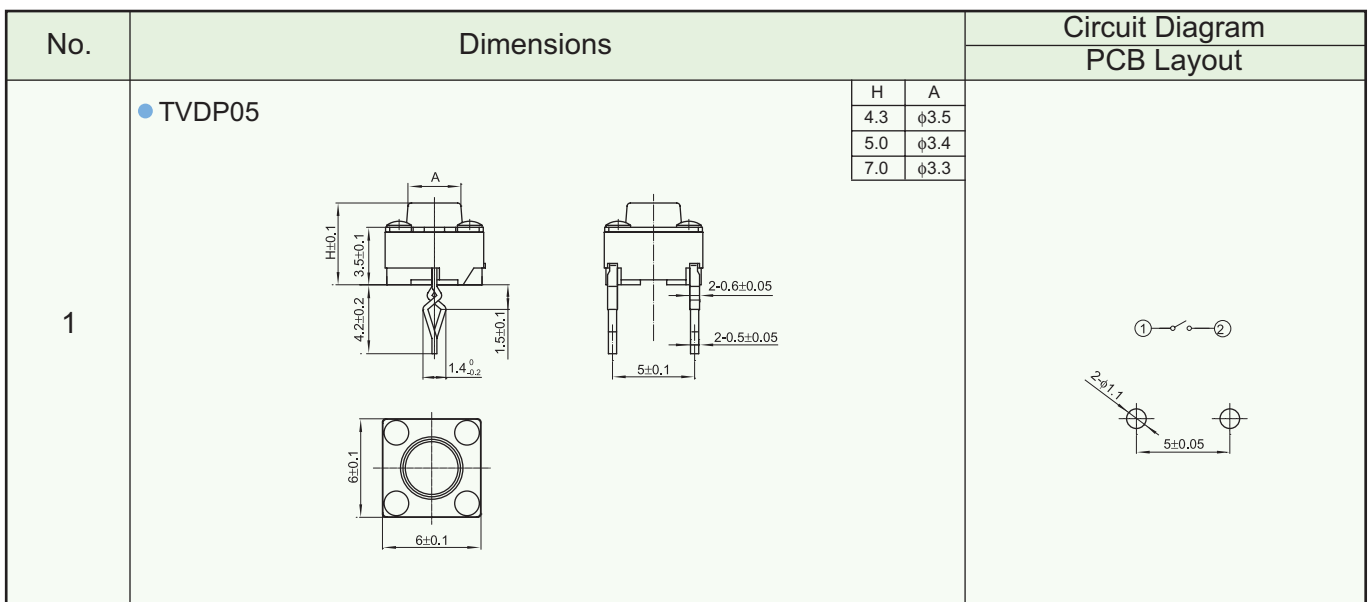
◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -20°C to +70°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:D=1,000,000Cycles B=500,000Cycles C=300,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf D:70gf |
| | Travel | 0.25 ± 0.1mm |

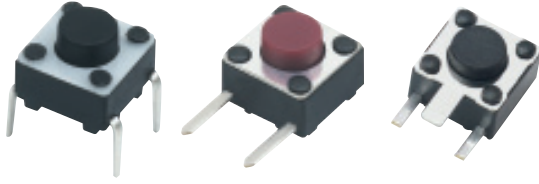
◆ DIAGRAM



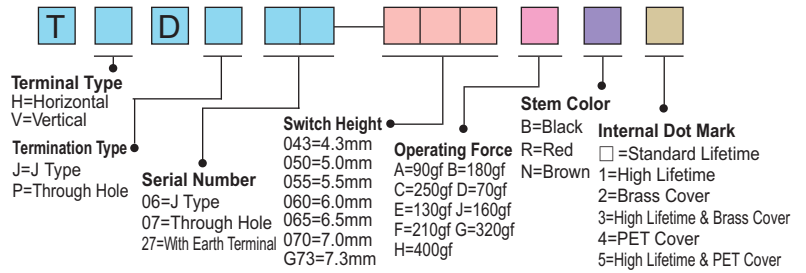
D SERIES

6.0x6.0 Other Terminal Shape Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Compact size 6x6mm
- Snap-in type
- Vertical push type
- Partial output terminal can be used as jumper pin
- Other terminal shape

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -40°C to +90°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B:D:E:J=1,000,000Cycles C:G=500,000Cycles H=300,000Cycles |
| Mechanical performance | Operating force | A:90gf D:70gf B:180gf E:130gf C:250gf J:160gf G:320gf H:400gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram PCB Layout | | | | | | | | | | | | | | |
|-----|--|-------------------------------|---|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|--|
| | | | | | | | | | | | | | | | | |
| 1 | <p>● TVDJ06</p> <table border="1"> <thead> <tr> <th>H</th> <th>A</th> </tr> </thead> <tbody> <tr><td>4.3</td><td>φ3.5</td></tr> <tr><td>5.0</td><td>φ3.4</td></tr> <tr><td>5.5</td><td>φ3.4</td></tr> <tr><td>6.0</td><td>φ3.3</td></tr> <tr><td>6.5</td><td>φ3.3</td></tr> <tr><td>7.0</td><td>φ3.3</td></tr> </tbody> </table> | H | A | 4.3 | φ3.5 | 5.0 | φ3.4 | 5.5 | φ3.4 | 6.0 | φ3.3 | 6.5 | φ3.3 | 7.0 | φ3.3 | |
| H | A | | | | | | | | | | | | | | | |
| 4.3 | φ3.5 | | | | | | | | | | | | | | | |
| 5.0 | φ3.4 | | | | | | | | | | | | | | | |
| 5.5 | φ3.4 | | | | | | | | | | | | | | | |
| 6.0 | φ3.3 | | | | | | | | | | | | | | | |
| 6.5 | φ3.3 | | | | | | | | | | | | | | | |
| 7.0 | φ3.3 | | | | | | | | | | | | | | | |
| 2 | <p>● THDP07</p> <table border="1"> <thead> <tr> <th>H</th> <th>A</th> </tr> </thead> <tbody> <tr><td>4.3</td><td>φ3.5</td></tr> <tr><td>5.0</td><td>φ3.4</td></tr> <tr><td>5.5</td><td>φ3.4</td></tr> <tr><td>6.0</td><td>φ3.3</td></tr> <tr><td>6.5</td><td>φ3.3</td></tr> <tr><td>7.0</td><td>φ3.3</td></tr> </tbody> </table> | H | A | 4.3 | φ3.5 | 5.0 | φ3.4 | 5.5 | φ3.4 | 6.0 | φ3.3 | 6.5 | φ3.3 | 7.0 | φ3.3 | |
| H | A | | | | | | | | | | | | | | | |
| 4.3 | φ3.5 | | | | | | | | | | | | | | | |
| 5.0 | φ3.4 | | | | | | | | | | | | | | | |
| 5.5 | φ3.4 | | | | | | | | | | | | | | | |
| 6.0 | φ3.3 | | | | | | | | | | | | | | | |
| 6.5 | φ3.3 | | | | | | | | | | | | | | | |
| 7.0 | φ3.3 | | | | | | | | | | | | | | | |
| 3 | <p>● THDP27</p> <table border="1"> <thead> <tr> <th>H</th> <th>A</th> </tr> </thead> <tbody> <tr><td>4.3</td><td>φ3.5</td></tr> <tr><td>5.0</td><td>φ3.4</td></tr> <tr><td>5.5</td><td>φ3.4</td></tr> <tr><td>6.0</td><td>φ3.3</td></tr> <tr><td>6.5</td><td>φ3.3</td></tr> <tr><td>7.0</td><td>φ3.3</td></tr> </tbody> </table> | H | A | 4.3 | φ3.5 | 5.0 | φ3.4 | 5.5 | φ3.4 | 6.0 | φ3.3 | 6.5 | φ3.3 | 7.0 | φ3.3 | |
| H | A | | | | | | | | | | | | | | | |
| 4.3 | φ3.5 | | | | | | | | | | | | | | | |
| 5.0 | φ3.4 | | | | | | | | | | | | | | | |
| 5.5 | φ3.4 | | | | | | | | | | | | | | | |
| 6.0 | φ3.3 | | | | | | | | | | | | | | | |
| 6.5 | φ3.3 | | | | | | | | | | | | | | | |
| 7.0 | φ3.3 | | | | | | | | | | | | | | | |

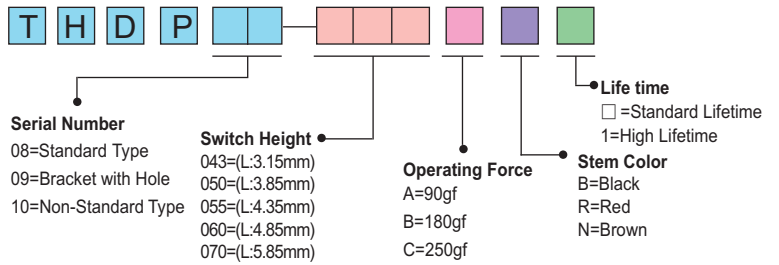
D SERIES

6.0x6.0 Bracket Shape Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Snap-in type
- Anti-ESD ground pin available
- Cap available
- Multiple button length

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -40°C to +90°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A=1,000,000Cycles B:J=500,000Cycles C=300,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram | | | | | | | | | | | | |
|-------|--|-----------------|---|------|-----|------|-----|------|-----|------|---|-------|---|--|
| | | PCB Layout | | | | | | | | | | | | |
| 1 | <p>● THDP08</p> <table border="1"> <thead> <tr> <th>L</th> <th>A</th> </tr> </thead> <tbody> <tr><td>3.15</td><td>3.5</td></tr> <tr><td>3.85</td><td>3.5</td></tr> <tr><td>5.85</td><td>3.3</td></tr> <tr><td>8.35</td><td>3</td></tr> <tr><td>15.85</td><td>3</td></tr> </tbody> </table> | L | A | 3.15 | 3.5 | 3.85 | 3.5 | 5.85 | 3.3 | 8.35 | 3 | 15.85 | 3 | |
| L | A | | | | | | | | | | | | | |
| 3.15 | 3.5 | | | | | | | | | | | | | |
| 3.85 | 3.5 | | | | | | | | | | | | | |
| 5.85 | 3.3 | | | | | | | | | | | | | |
| 8.35 | 3 | | | | | | | | | | | | | |
| 15.85 | 3 | | | | | | | | | | | | | |
| 2 | <p>● THDP09</p> <table border="1"> <thead> <tr> <th>L</th> <th>A</th> </tr> </thead> <tbody> <tr><td>3.15</td><td>3.5</td></tr> <tr><td>3.85</td><td>3.5</td></tr> <tr><td>5.85</td><td>3.3</td></tr> <tr><td>8.35</td><td>3</td></tr> <tr><td>15.85</td><td>3</td></tr> </tbody> </table> | L | A | 3.15 | 3.5 | 3.85 | 3.5 | 5.85 | 3.3 | 8.35 | 3 | 15.85 | 3 | |
| L | A | | | | | | | | | | | | | |
| 3.15 | 3.5 | | | | | | | | | | | | | |
| 3.85 | 3.5 | | | | | | | | | | | | | |
| 5.85 | 3.3 | | | | | | | | | | | | | |
| 8.35 | 3 | | | | | | | | | | | | | |
| 15.85 | 3 | | | | | | | | | | | | | |
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| L | A | | | | | | | | | | | | | |
| 3.15 | 3.5 | | | | | | | | | | | | | |
| 3.85 | 3.5 | | | | | | | | | | | | | |
| 5.85 | 3.3 | | | | | | | | | | | | | |
| 8.35 | 3 | | | | | | | | | | | | | |
| 15.85 | 3 | | | | | | | | | | | | | |



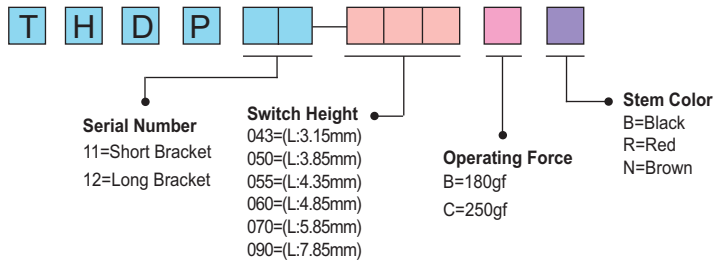
D SERIES

6.0x6.0 Other Bracket Shape Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- 6x6mm, Snap-in type
- Ground pin available
- Reflow solderable
- Partial output terminal can be used as jumper pin

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---------------------------------|
| Operating temperature range | | -40°C to +90°C |
| Electrical performance | Rating | 50mA, 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=500,000Cycles C=300,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram | | | | | | | | | | | | |
|-------|---|-----------------|---|------|-----|------|-----|------|-----|------|---|-------|---|--|
| | | PCB Layout | | | | | | | | | | | | |
| 1 | <p>● THDP11</p> <table border="1"> <thead> <tr> <th>L</th> <th>A</th> </tr> </thead> <tbody> <tr> <td>3.15</td> <td>3.5</td> </tr> <tr> <td>3.85</td> <td>3.5</td> </tr> <tr> <td>5.85</td> <td>3.3</td> </tr> <tr> <td>8.35</td> <td>3</td> </tr> <tr> <td>15.85</td> <td>3</td> </tr> </tbody> </table> | L | A | 3.15 | 3.5 | 3.85 | 3.5 | 5.85 | 3.3 | 8.35 | 3 | 15.85 | 3 | |
| L | A | | | | | | | | | | | | | |
| 3.15 | 3.5 | | | | | | | | | | | | | |
| 3.85 | 3.5 | | | | | | | | | | | | | |
| 5.85 | 3.3 | | | | | | | | | | | | | |
| 8.35 | 3 | | | | | | | | | | | | | |
| 15.85 | 3 | | | | | | | | | | | | | |
| 2 | <p>● THDP12</p> <table border="1"> <thead> <tr> <th>L</th> <th>A</th> </tr> </thead> <tbody> <tr> <td>3.15</td> <td>3.5</td> </tr> <tr> <td>3.85</td> <td>3.5</td> </tr> <tr> <td>5.85</td> <td>3.3</td> </tr> <tr> <td>8.35</td> <td>3</td> </tr> <tr> <td>15.85</td> <td>3</td> </tr> </tbody> </table> | L | A | 3.15 | 3.5 | 3.85 | 3.5 | 5.85 | 3.3 | 8.35 | 3 | 15.85 | 3 | |
| L | A | | | | | | | | | | | | | |
| 3.15 | 3.5 | | | | | | | | | | | | | |
| 3.85 | 3.5 | | | | | | | | | | | | | |
| 5.85 | 3.3 | | | | | | | | | | | | | |
| 8.35 | 3 | | | | | | | | | | | | | |
| 15.85 | 3 | | | | | | | | | | | | | |



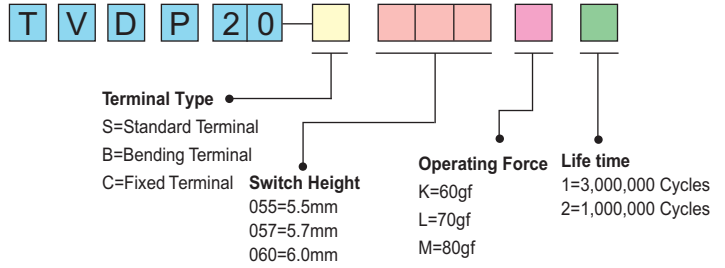
D SERIES

6.2x6.2 Long-Life Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Long lifetime of 3 million Cycles
- 6.2x6.2mm Snap-in type
- Excellent tactile feedback

◆ APPLICATIONS

- Smartphones, tablets
- Headsets, wearables
- Notebooks, peripherals

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | K:L:M=1,000,000Cycles |
| Mechanical performance | Operating force | K:60gf L:70gf M:80gf |
| | Travel | 0.30 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|--------------|-----------------|
| | | PCB Layout |
| 1 | ● TVDP20 | |

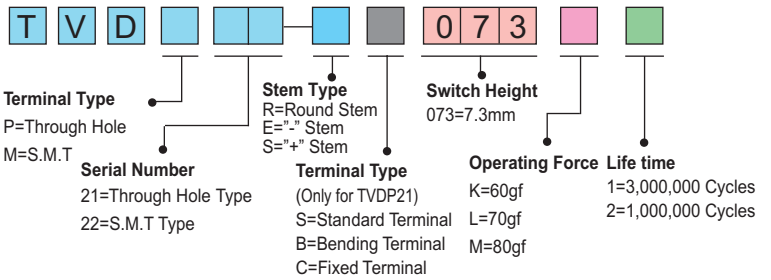
D SERIES

6.2x6.2 Long-Life Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Long lifetime of 3 million Cycles
- 6.2x6.2mm Snap-in type
- Excellent tactile feedback

◆ APPLICATIONS

- Smartphones, tablets
- Headsets, wearables
- Notebooks, peripherals

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | K:L:M=1,000,000Cycles |
| Mechanical performance | Operating force | K:60gf L:70gf M:80gf |
| | Travel | 0.30 ± 0.1mm |

◆ DIAGRAM

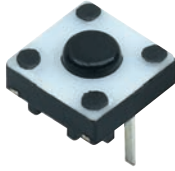
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|-----|------------|-----------------|
| | | PCB Layout |
| 1 | | |
| 2 | | |
| 3 | | |



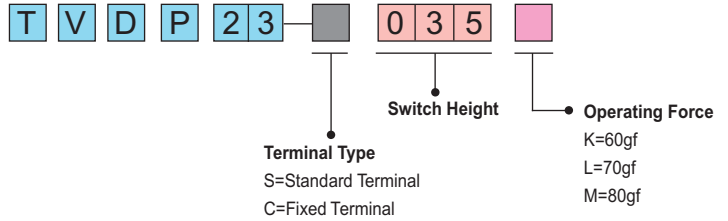
D SERIES

6.3x6.3 Long-Life Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Long lifetime of 3 million Cycles
- 6.3x6.3mm Snap-in type
- Excellent tactile feedback

◆ APPLICATIONS

- Smartphones, tablets
- Headsets, wearables
- Notebooks, peripherals

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | K:L:M=1,000,000Cycles |
| Mechanical performance | Operating force | K:60gf L:70gf M:80gf |
| | Travel | 0.30 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVDP23</p> | |

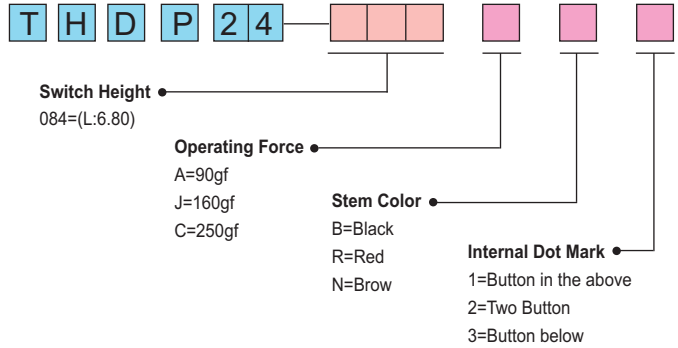
D SERIES

9.1x7.3 Multiple Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Double switch
- Right angle type
- Snap-in type

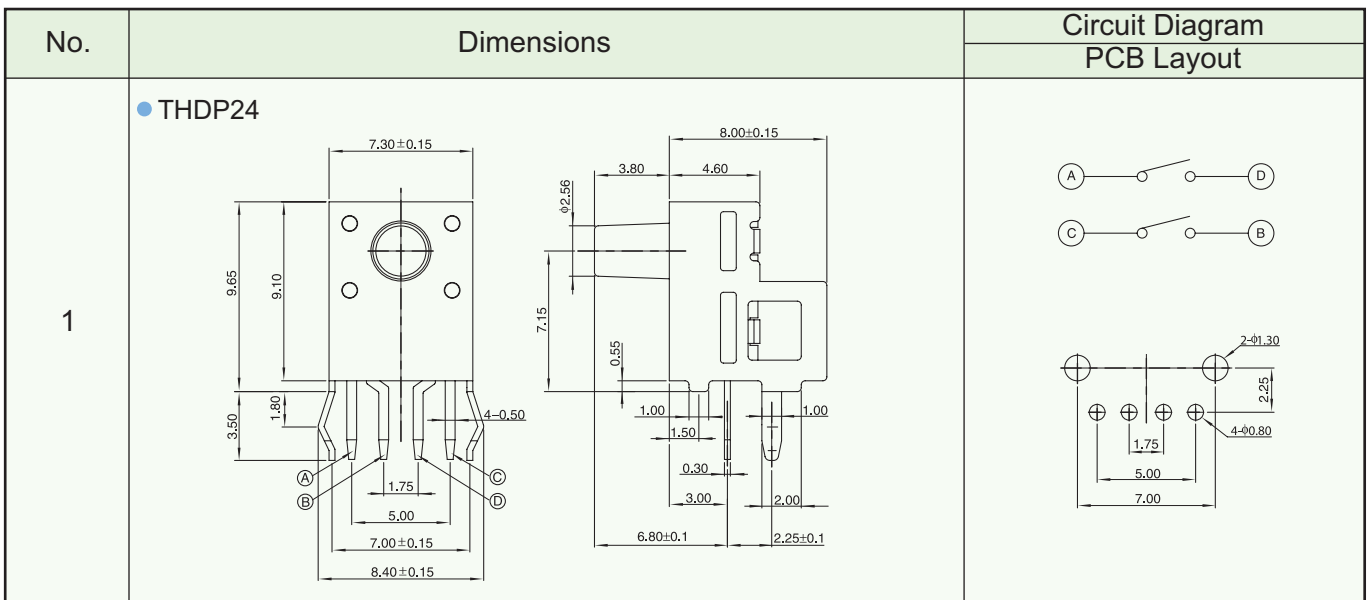
◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -40℃ to +90℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A=1,000,000Cycles J=500,000Cycles C=300,000Cycles |
| Mechanical performance | Operating force | A:90gf J:160gf C:250gf |
| | Travel | 0.20 ± 0.1mm |

◆ DIAGRAM





D SERIES

6.0x6.0 Other Bracket Shape Type Tact Switch

TACT SWITCH



HOW TO ORDER

T H D P 2 5



Switch Height
 043=(L:3.15mm)
 050=(L:3.85mm)
 055=(L:4.35mm)
 060=(L:4.85mm)
 070=(L:5.85mm)
 090=(L:7.85mm)

Operating Force
 B=180gf
 C=250gf
 D=70gf
 J=160gf

Stem Color
 B=Black
 R=Red
 N=Brown

◆ FEATURES

- 6x6mm, Snap-in type
- Ground pin available
- Reflow solderable
- Partial output terminal can be used as jumper pin

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--------------------|
| Operating temperature range | | -40°C to +90°C |
| Electrical performance | Rating | 50mA, 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | J:C=100,000Cycles |
| Mechanical performance | Operating force | J:160gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram | | | | | | | | | | | | |
|-------|--|-----------------|---|------|-----|------|-----|------|-----|------|---|-------|---|--|
| | | PCB Layout | | | | | | | | | | | | |
| 1 | <p>● THDP25</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>L</th> <th>A</th> </tr> </thead> <tbody> <tr> <td>3.15</td> <td>3.5</td> </tr> <tr> <td>3.85</td> <td>3.5</td> </tr> <tr> <td>5.85</td> <td>3.3</td> </tr> <tr> <td>8.35</td> <td>3</td> </tr> <tr> <td>15.85</td> <td>3</td> </tr> </tbody> </table> | L | A | 3.15 | 3.5 | 3.85 | 3.5 | 5.85 | 3.3 | 8.35 | 3 | 15.85 | 3 | |
| L | A | | | | | | | | | | | | | |
| 3.15 | 3.5 | | | | | | | | | | | | | |
| 3.85 | 3.5 | | | | | | | | | | | | | |
| 5.85 | 3.3 | | | | | | | | | | | | | |
| 8.35 | 3 | | | | | | | | | | | | | |
| 15.85 | 3 | | | | | | | | | | | | | |

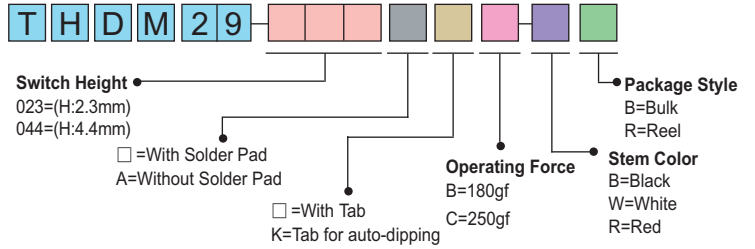
D SERIES

6.0x6.0 Bracket Shape Type Tact Switch

TACT SWITCH

New

HOW TO ORDER



◆ FEATURES

- Dustproof sealed structure
- With bracket
- 6x6mm right angle type
- Solder pad available

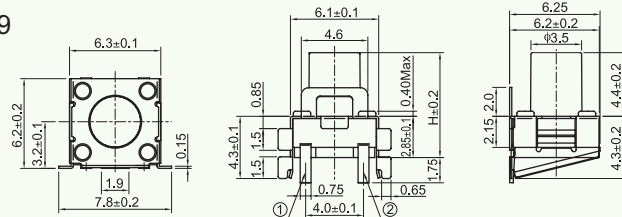
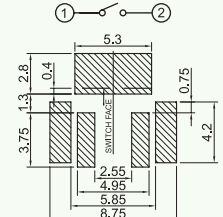
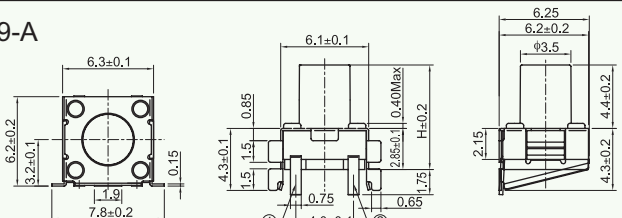
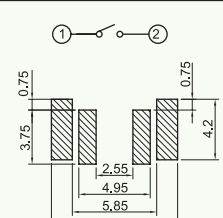
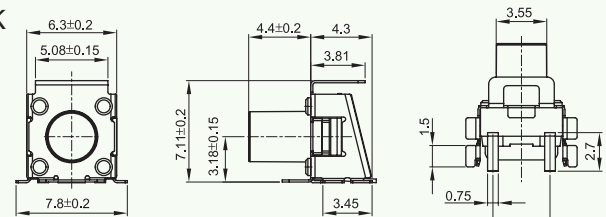
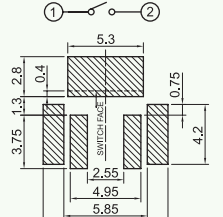
◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---------------------------------|
| Operating temperature range | | -20℃ to +70℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=500,000Cycles C=300,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.15 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|--|---|
| | | PCB Layout |
| 1 | <p>● THDM29</p>  |  |
| 2 | <p>● THDM29-A</p>  |  |
| 3 | <p>● THDM29-K</p>  |  |



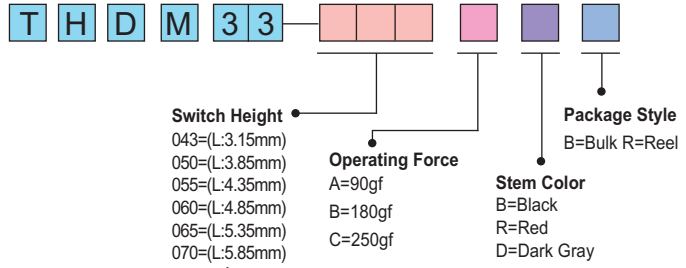
D SERIES

6.0x6.0 SMT & Bracket Shape Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- 6x6mm, SMD type
- Ground pin available
- Reflow solderable
- Cap available
- Multiple button length

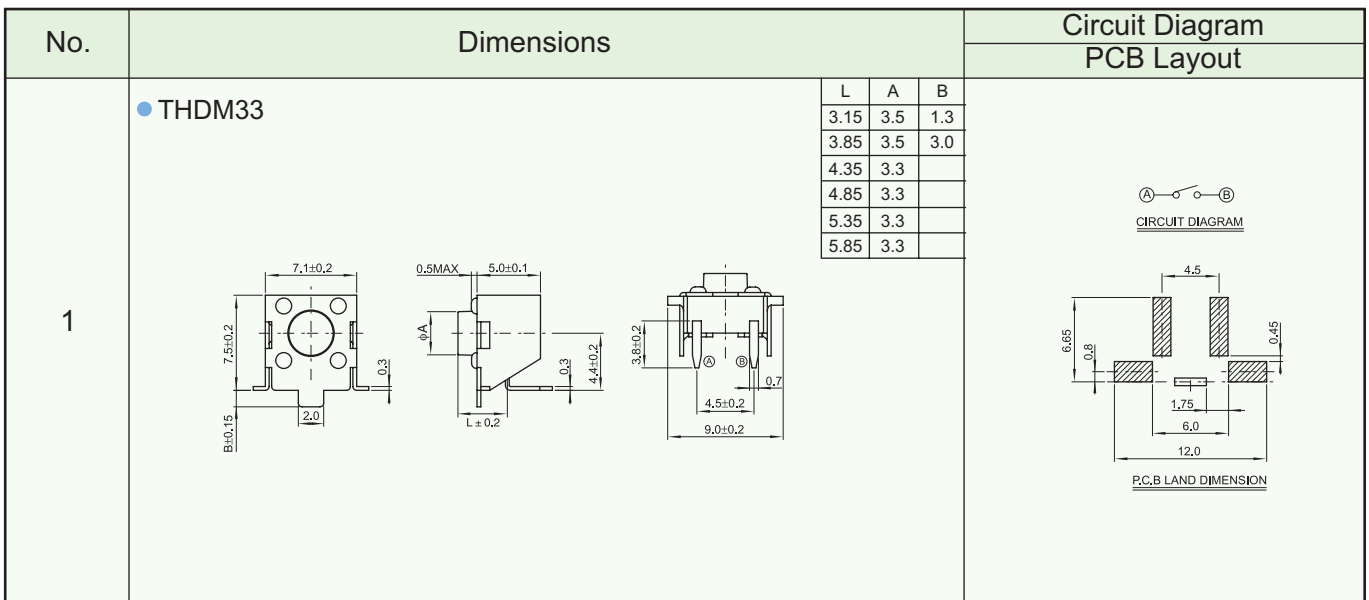
◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A=300,000Cycles J:C=100,000Cycles |
| Mechanical performance | Operating force | A:90gf J:160gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM





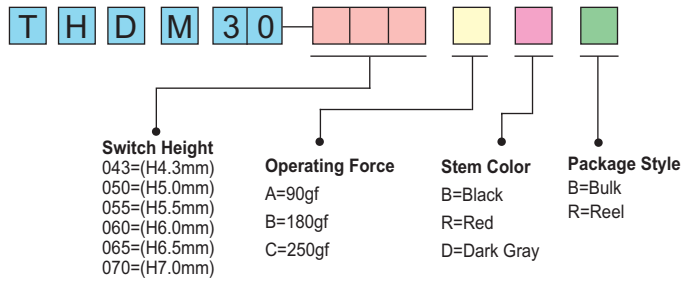
D SERIES

6.0x6.0 Bracket Shape Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- 6x6mm, SMD type
- Reflow solderable
- With bracket

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -20°C to +70°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B=500,000Cycles C=300,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● THDM30</p> | |



D SERIES

6.0x6.0 Other Bracket Shape Type Tact Switch

TACT SWITCH



New

HOW TO ORDER

T H D P 3 1

Switch Height
 043=(L:3.15mm)
 050=(L:3.85mm)
 055=(L:4.35mm)
 060=(L:4.85mm)
 070=(L:5.85mm)
 090=(L:7.85mm)

Operating Force
 A=90gf B=180gf
 C=250gf D=70gf
 E=130gf J=160gf
 F=210gf G=320gf
 H=400gf I= 520gf

Stem Color
 B=Black
 R=Red
 D=Dark Gray

◆ FEATURES

- Right angle type
- Long bracket
- Snap-in type

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--------------------|
| Operating temperature range | | -20℃ to +70℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | J:C=100,000Cycles |
| Mechanical performance | Operating force | J:160gf C:250gf |
| | Travel | 0.25 ± 0.2mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● THDP31</p> | |



D SERIES

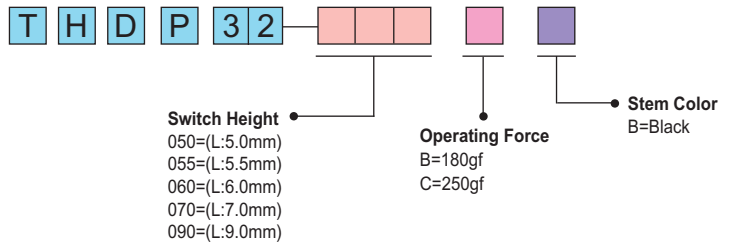
14.0x8.6 Multiple Type Tact Switch

TACT SWITCH



New

HOW TO ORDER



◆ FEATURES

- Snap-in type
- Reflow solderable
- With bracket
- Dual button

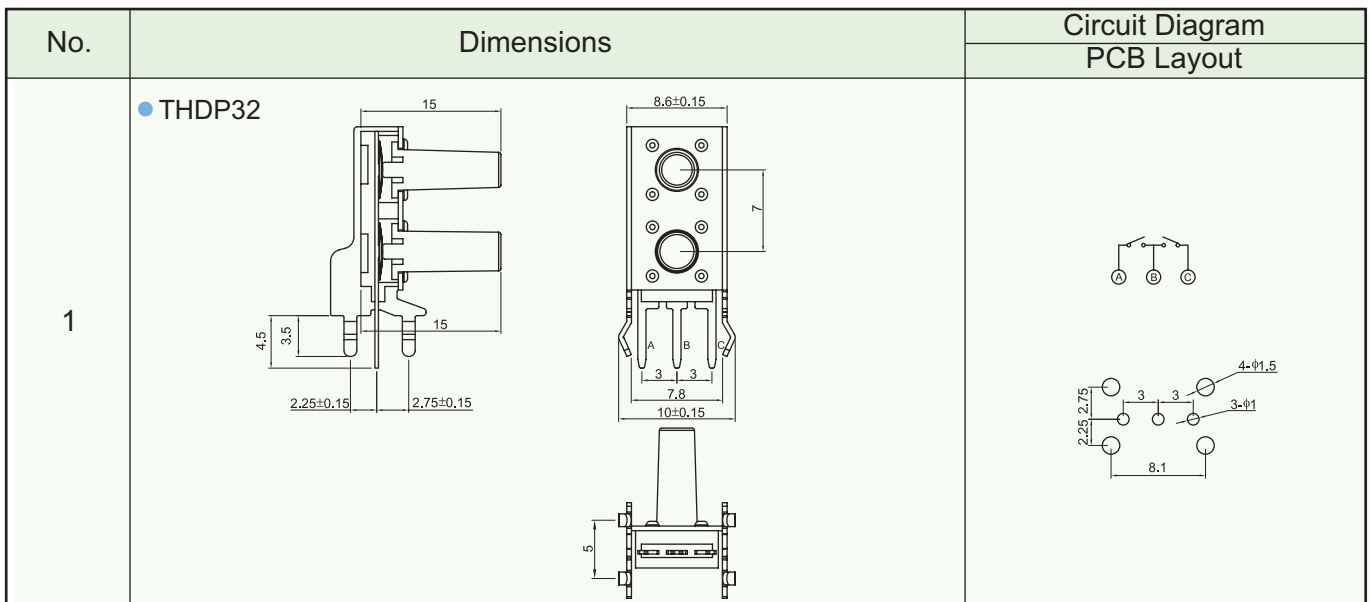
◆ APPLICATIONS

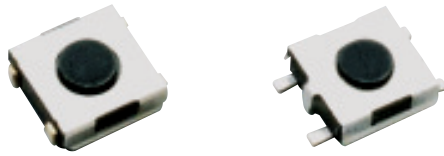
- Visual
- Audio
- Pro audio

◆ SPECIFICATION

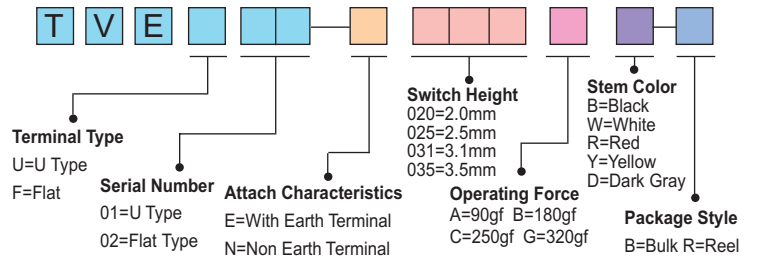
| Items | | Standard |
|-----------------------------|-----------------------|--------------------|
| Operating temperature range | | -20℃ to +70℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B:C=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.2mm |

◆ DIAGRAM





HOW TO ORDER



◆ Features

- Compact size 6x6mm for high density mounting
- Vertical Push type
- Reflow solderable
- Ground pin available

◆ Applications

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B=1,000,000Cycles C=500,000Cycles G=300,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf G:320gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram PCB Layout |
|-----|-----------------|-------------------------------|
| 1 | <p>● TVEU01</p> | |
| 2 | <p>● TVEF02</p> | |



E SERIES

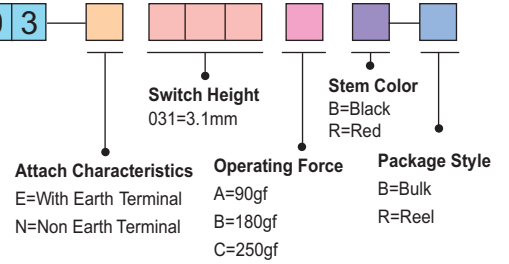
6.2x6.2 Non-rotating Stem Type Tact Switch

TACT SWITCH



HOW TO ORDER

T V E M 0 3



◆ FEATURES

- Compact size 6.2x6.2mm for high density mounting
- Vertical Push type
- Reflow solderable
- Low profile of 3.1mm height
- With anti-ESD ground pin
- Non-rotating Button

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-------------------------------------|
| Operating temperature range | | -30 °C to +85 °C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B=1,000,000Cycles C=500,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

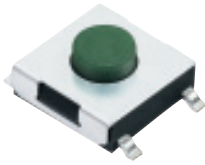
| No. | Dimensions | Circuit Diagram PCB Layout |
|-----|---|-------------------------------|
| 1 | <p>● TVEM03</p> <p>Top View Dimensions: 6.5±0.1, 4.5±0.1, 6.2±0.1, 4±0.1, 0.7±0.05, 4±0.1, 4±0.1, 4±0.1, 0.7±0.05</p> <p>Side View Dimensions: 3.1±0.05, 2.65±0.05, 8±0.1, φ3</p> | |



E SERIES

6.2x6.2 Dust-Proof Type Tact Switch

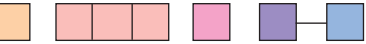
TACT SWITCH



HOW TO ORDER

T V E M 0 4

Attach Characteristics
 E=With Earth Terminal
 N=Non Earth Terminal



Switch Height
 025=2.5mm
 031=3.1mm
 034=3.4mm
 050=5.0mm

Operating Force
 B=180gf
 C=250gf

Stem Color
 B=Black
 R=Red
 G=Green
 U=Blue

Package Style
 B=Bulk R=Reel

◆ FEATURES

- Compact size 6.2x6.2mm for high density mounting
- Vertical Push type
- Reflow solderable
- Low profile of 3.1mm or 5mm height
- With anti-ESD ground pin
- Dustproof sealed structure

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=1,000,000Cycles C=500,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

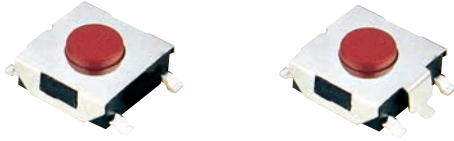
◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVEM04</p> | |
| | | |

E SERIES

6.2x6.2 SMT Terminals Type Tact Switch

TACT SWITCH



HOW TO ORDER

T V E M 0 5

Attach Characteristics
E=With Earth Terminal
N=Non Earth Terminal

Switch Height
025=2.5mm
031=3.1mm
034=3.4mm
043=4.3mm
050=5.0mm
055=5.5mm

Operating Force
A=90gf B=180gf
C=250gf D=70gf
E=130gf J=160gf

Stem Color
B=Black
R=Red

Package Style
B=Bulk
R=Reel

◆ FEATURES

- Compact size 6.2x6.2mm for high density mounting
- Vertical Push type
- Reflow solderable
- Low profile of 2.5mm/3.1mm/5mm height
- With anti-ESD ground pin
- Dustproof sealed structure

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A:B:D:J=1,000,000Cycles C=500,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf D:70gf J:120gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

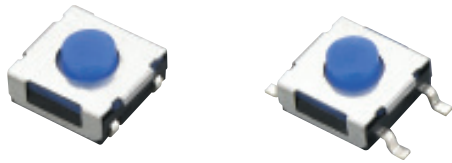
| No. | Dimensions | Circuit Diagram PCB Layout |
|-----|-------------------|-------------------------------|
| 1 | <p>● TVEM05-N</p> | |
| 2 | <p>● TVEM05-E</p> | |



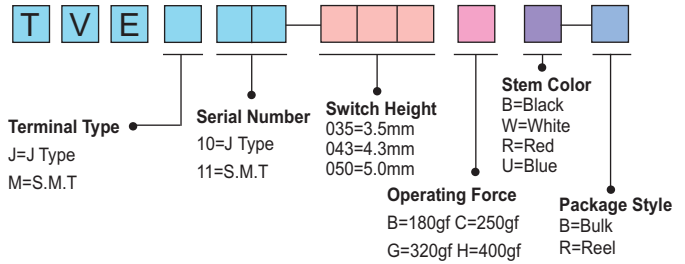
E SERIES

6.2x6.2 With Middle-travel (SMT) Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Compact size 6.2x6.2mm for high density mounting
- Vertical Push type
- Reflow solderable
- Rubber button with excellent feeling
- 0.3-0.55mm middle travel

◆ APPLICATIONS

- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30℃ to +85℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=1,000,000Cycles C=500,000Cycles G=300,000Cycles H=200,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf G:320gf H:400gf |
| | Travel | 0.35 ± 0.1mm |

◆ DIAGRAM

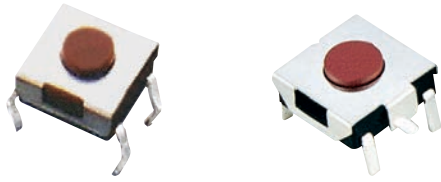
| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVEJ10</p> | |
| 2 | <p>● TVEM11</p> | |



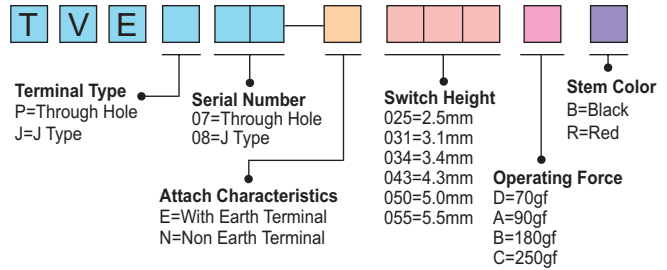
E SERIES

6.2x6.2 Through Hole Terminals Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Dustproof sealed structure
- 6x6mm snap-in type
- Ground pin available
-

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A=1,000,000Cycles B=1,000,000Cycles C=500,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

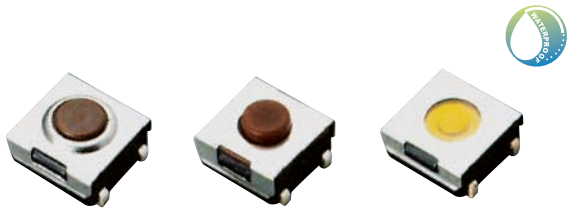
| No. | Dimensions | Circuit Diagram | | | | |
|-----|---|-----------------|-----|-----|-----|--|
| | | PCB Layout | | | | |
| 1 | <p>● TVEP07</p> <table border="1"> <tr><td>H</td></tr> <tr><td>3.4</td></tr> <tr><td>3.1</td></tr> <tr><td>2.5</td></tr> </table> | H | 3.4 | 3.1 | 2.5 | |
| H | | | | | | |
| 3.4 | | | | | | |
| 3.1 | | | | | | |
| 2.5 | | | | | | |
| 2 | <p>● TVEJ08</p> <table border="1"> <tr><td>H</td></tr> <tr><td>3.4</td></tr> <tr><td>3.1</td></tr> <tr><td>2.5</td></tr> </table> | H | 3.4 | 3.1 | 2.5 | |
| H | | | | | | |
| 3.4 | | | | | | |
| 3.1 | | | | | | |
| 2.5 | | | | | | |



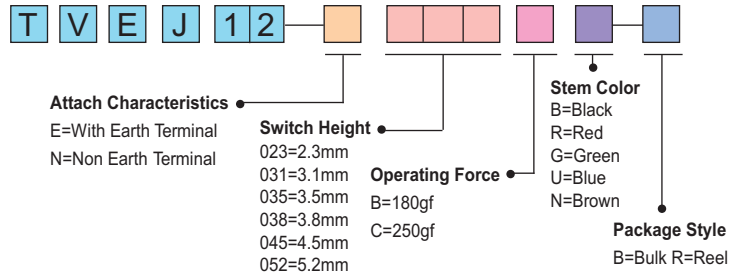
G SERIES

6.2x6.2 (J SMT) Series With Washable Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- 6.2x6.2mm surface mount type
- Reflow solderable
- Anti-ESD ground terminal available
- Waterproof sealed structure

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -30 °C to +85 °C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=1,000,000Cycles C=500,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.3 ± 0.1mm |

◆ DIAGRAM

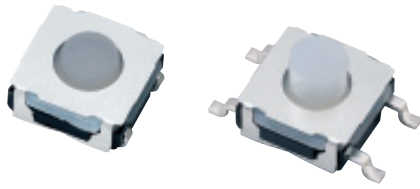
| No. | Dimensions | Circuit Diagram |
|-----|------------------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVEJ12- □ 031</p> | |
| 2 | <p>● TVEJ12- □ 052</p> | |
| 3 | <p>● TVEJ12- □ 023</p> | |



G SERIES

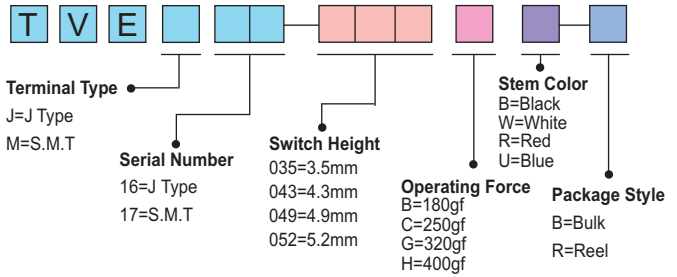
6.2x6.2 Long Travel SMT Type Tactile Switch

TACT SWITCH



New

HOW TO ORDER



◆ FEATURES

- Long travel type
- J or M terminal
- Long lifetime
- IP67 waterproof sealed structure

◆ APPLICATIONS

- Robots, drones
- Industrial equipment
- Converters, inverters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-------------------------------------|
| Operating temperature range | | -30℃ to +85℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=3,000,000Cycles C=1,000,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.5 ± 0.3mm |

◆ DIAGRAM

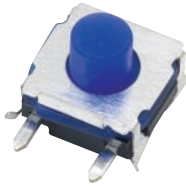
| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVEJ16</p> | |
| 2 | <p>● TVEM17</p> | |



G SERIES

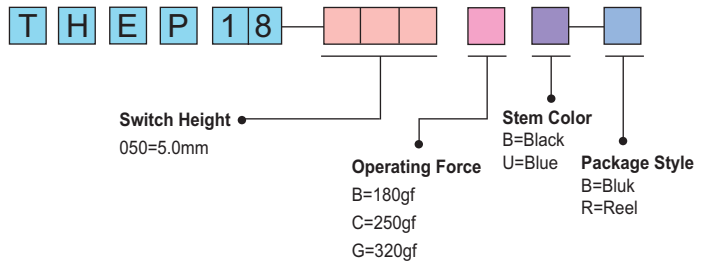
6.2x6.2 Side Actuated Sealed Tact Switch

TACT SWITCH



New

HOW TO ORDER



◆ FEATURES

- Sealed structure type
- Horizontal push type
- excellent tactile feeling

◆ APPLICATIONS

- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=3,000,000Cycles C=1,000,000Cycles G=500,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf G:320gf |
| | Travel | 0.5 ± 0.3mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|---|---|
| | | PCB Layout |
| 1 | <p>● THEP18</p> <p>Top view: 6.2 x 6.2 mm square, 4±0.05 mm pin spacing, 0.7 mm pin width.</p> <p>Side view: 2.55±0.15 mm height, 6.3 mm total width, 2.4 mm base width, 4.02±0.2 mm base length.</p> <p>Bottom view: 3.4 mm pin spacing, 7.4±0.2 mm total width, H(6.0)±0.2 mm total height.</p> | <p>The circuit diagram shows a switch with terminals 1 and 3. The PCB layout shows a 6.6 mm wide footprint with 4 mm pin spacing, 1.6 mm pin diameter, and 1.1 mm pin diameter. It includes dimensions for the switch body (4 mm x 4 mm) and mounting holes (1.25 mm diameter).</p> |



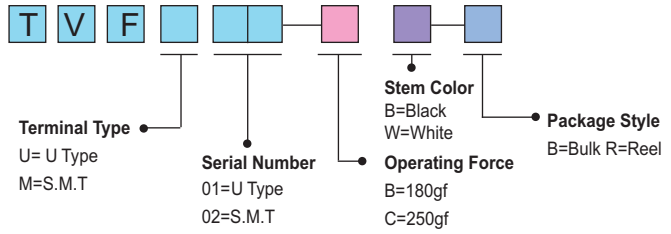
F SERIES

6.0x6.0 Long Travel Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Long travel type
- Silent operating function
- Miniature 6x6mm for high density mounting
- Soft touch feeling with low contact resistance
- Reflow solderable

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---------------------------------|
| Operating temperature range | | -40°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=500,000Cycles C=300,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 1.30 ± 0.2mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVFU01</p> | |
| 2 | <p>● TVFM02</p> | |



F SERIES

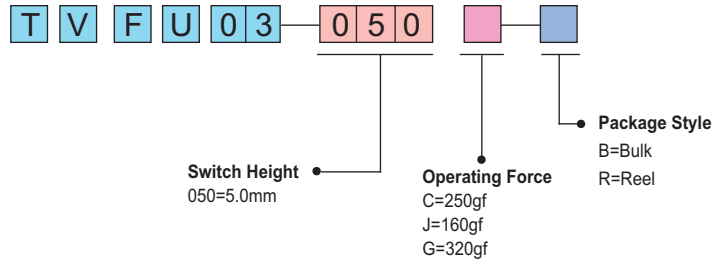
6.0x6.0 Long Travel Tact Switch

TACT SWITCH



New

HOW TO ORDER



◆ FEATURES

- Long travel type
- Silent operating function
- Miniature 6x6mm for high density mounting
- Long lifetime of 10,0000 Cycles
- Soft touch feeling with low contact resistance
- Reflow solderable

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -40°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B:C=300,000Cycles G=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf G:320gf |
| | Travel | 1.30 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVFU03</p> | |



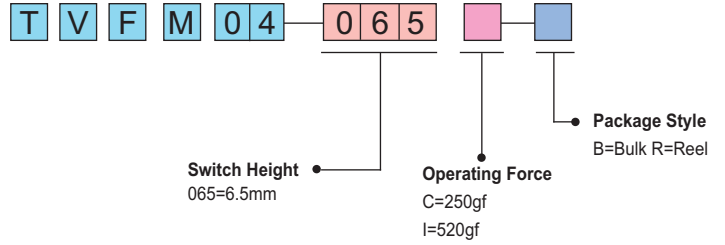
F SERIES

6.0x6.0 Long Travel Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Long travel type
- Silent operating function
- Miniature 6x6mm for high density mounting
- Long lifetime of 10,0000 Cycles
- High operating force
- Reflow solderable

◆ APPLICATIONS

- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---------------------------------|
| Operating temperature range | | -40°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | C=300,000Cycles I=100,000Cycles |
| Mechanical performance | Operating force | C:250gf I:520gf |
| | Travel | 1.3 ± 0.2mm |

◆ DIAGRAM

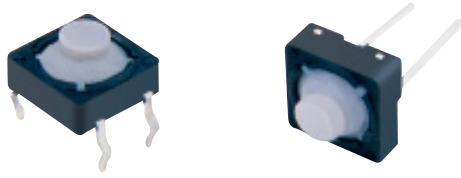
| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVFM04</p> | |



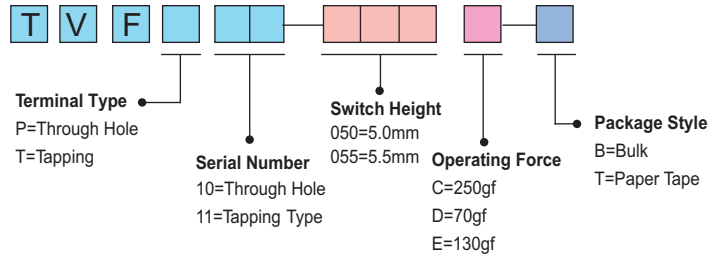
F SERIES

7.8x7.8 Long Travel Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- 7.8x7.8mm for high density mounting
- Radial tapping type
- Silicone button with soft touch feeling
- Automatically dipped into pcb by machine
- Horizontal push type

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|------------------------|
| Operating temperature range | | -30℃ to +85℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | D:E:C=100,000Cycles |
| Mechanical performance | Operating force | D:70gf E:130gf C:250gf |
| | Travel | 1.20 ± 0.2mm |

◆ DIAGRAM

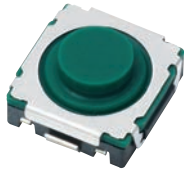
| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVFP10</p> | |
| 2 | <p>● TVFT11</p> | |



F SERIES

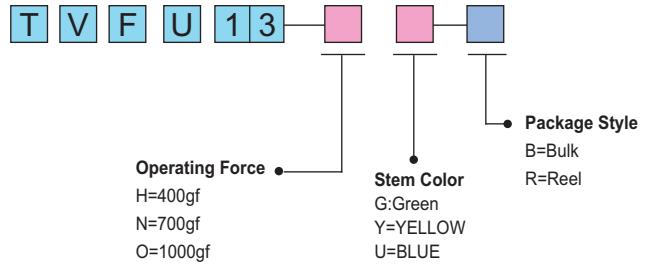
8.0x8.0 Silent Middle Travel Tact Switch

TACT SWITCH



New

HOW TO ORDER



◆ FEATURES

- 8.5x8.5mm, surface mounting type
- Middle travel
- High operating force
- IP67 Waterproof sealed structure
- Silent operating function

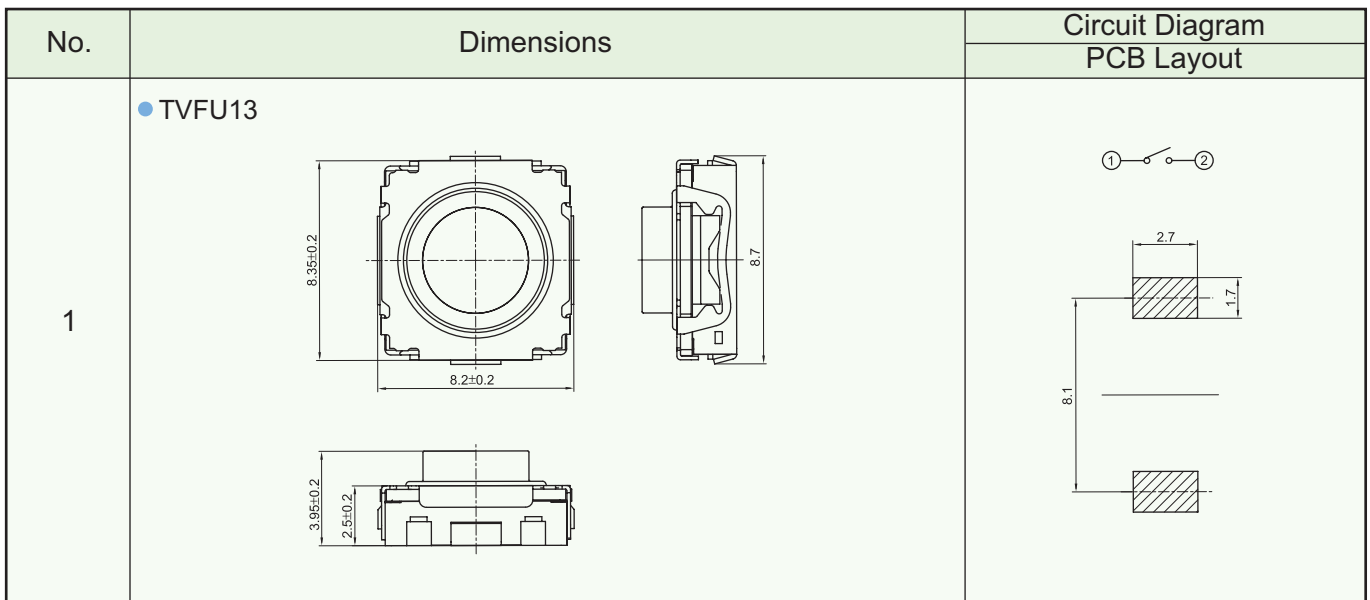
◆ APPLICATIONS

- Headlights
- Side doors, trunk doors, Hoods
- Remote keyless entry
- Navigation/audio systems, HVAC
- Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -40°C to +90°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | H:N=500,000Cycles O=200,000Cycles |
| Mechanical performance | Operating force | H:400gf N:700gf O:1000gf |
| | Travel | 0.9 ± 0.2mm |

◆ DIAGRAM

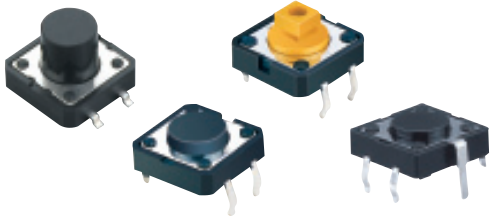




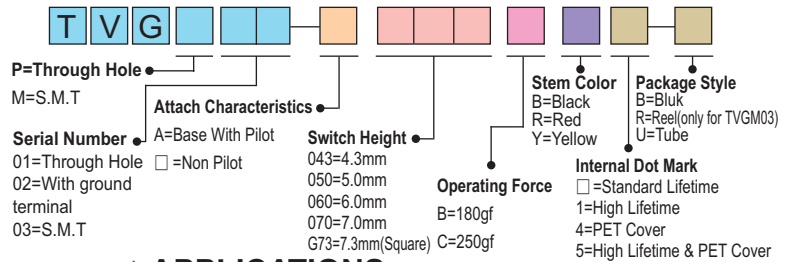
G SERIES

12.0x12.0 Flat Stem With Stable Operation Feeling Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- High reliable metal contacts
- Dustproof sealed structure
- Long lifetime and high reliable metal contacts
- Reflow solderable
- Partial output terminal can be used as jumper pin
- Cap available
- Ground terminal available

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---------------------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=200,000Cycles C=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

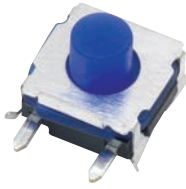
| No. | Dimensions | Circuit Diagram | |
|-----|--|---|--|
| | | PCB Layout | |
| 1 | <p>● TVGM03</p> <p>Dimensions: Stem height 0.3max, base diameter φ6.7, width 15±0.2, terminal spacing 12±0.2. Switch height options: 4.3, 5.0, 6.0, 7.0.</p> | <p>Terminal layout: 12.5 x 6.5 mm.</p> | |
| 2 | <p>● TVGP01</p> <p>Dimensions: Stem height H±0.1, base diameter φ6.7, width 12.5, total width 14.1. Terminal spacing 5.0±0.2. Switch height options: 4.3, 5.0, 6.0, 7.0.</p> | <p>Terminal layout: 12.5±0.1 mm.</p> | |
| 3 | <p>● TVGP01-□ G73</p> <p>Dimensions: Stem height 1.8, base diameter φ6.7, width 12.5, total width 14.1. Terminal spacing 5.0±0.2. Switch height options: 4.3, 5.0, 6.0, 7.0.</p> | <p>Terminal layout: 12.5±0.1 mm.</p> | |
| 4 | <p>● TVGP02</p> <p>Dimensions: Stem height 1, base diameter φ6.7, width 12.5, total width 14.1. Terminal spacing 7. Switch height options: 4.3, 5.0, 6.0, 7.0.</p> | <p>Terminal layout: 12.5 x 5-φ1.3 mm.</p> | |



G SERIES

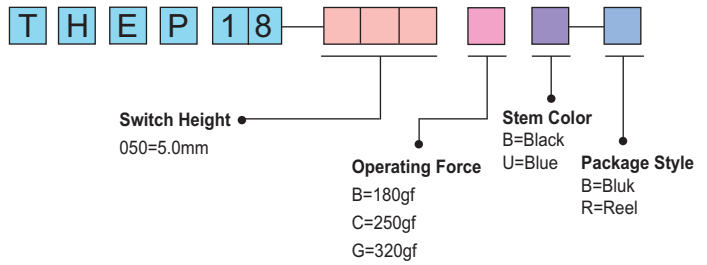
6.2x6.2 Side Actuated Sealed Tact Switch

TACT SWITCH



New

HOW TO ORDER



◆ FEATURES

- Sealed structure type
- Horizontal push type
- excellent tactile feeling

◆ APPLICATIONS

- Navigation/audio systems
- HVAC Overhead consoles
- Steering
- Shifters

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=3,000,000Cycles C=1,000,000Cycles G=500,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf G:320gf |
| | Travel | 0.5 ± 0.3mm |

◆ DIAGRAM

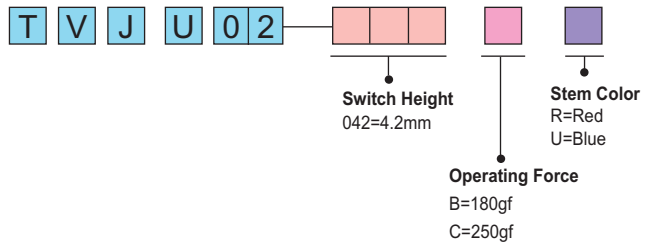
| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● THEP18</p> | |

J SERIES

6.8x6.8 Sealed Tact Switch



HOW TO ORDER



◆ FEATURES

- Contacts sealed structure
- Vertical push type
- Partial output terminal can be used as jumper pin

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|---|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=3,000,000Cycles C=1,000,000Cycles G=500,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

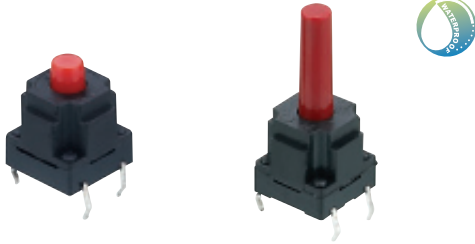
| No. | Dimensions | Circuit Diagram |
|-----|-----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVJU02</p> | |



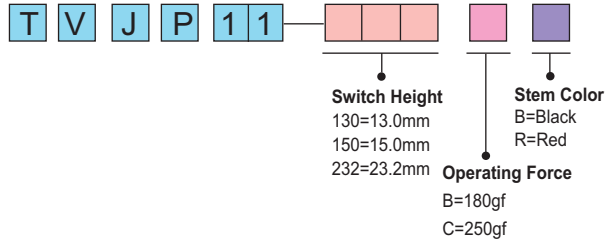
J SERIES

10.0x10.0 Washable Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Waterproof sealed structure
- 10x10mm snap-in type
- Partial output terminal can be used as jumper pin

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

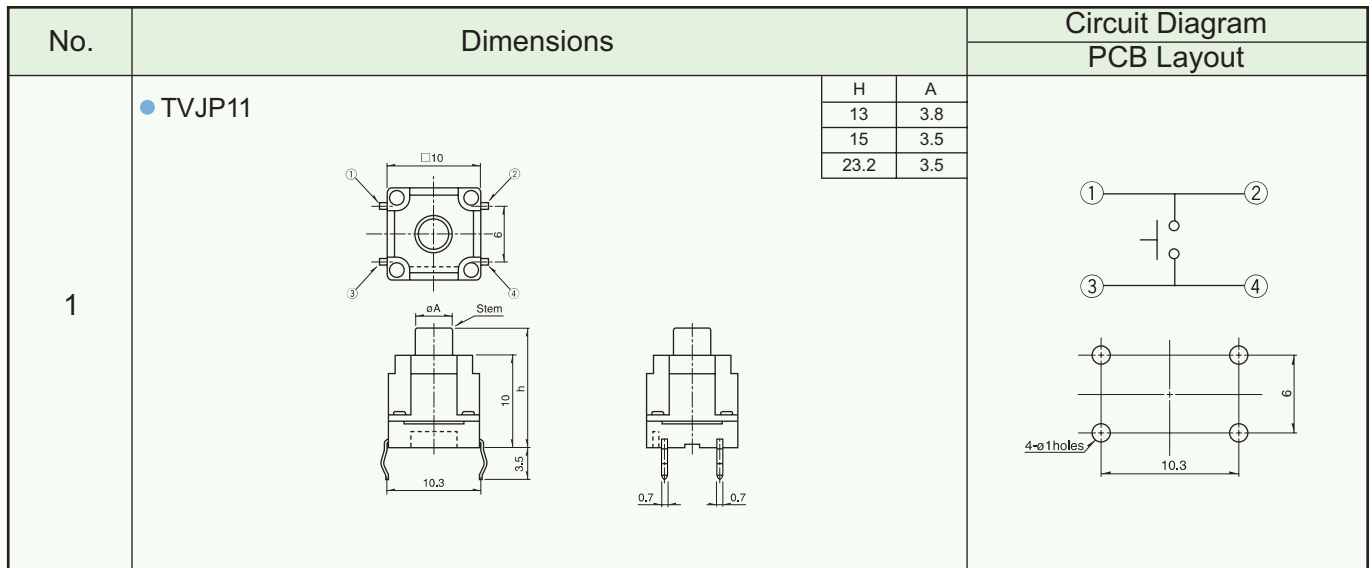
◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--------------------|
| Operating temperature range | | -40°C to +90°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 500mΩ max. |
| Durability | Lifetime | B:C=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.30 ± 0.1mm |

◆ WATER RESISTING PERFORMANCE

| | |
|----------------------|------|
| Temperature of water | 60°C |
| Depth of water | 10cm |
| Immersion duration | 240h |

◆ DIAGRAM





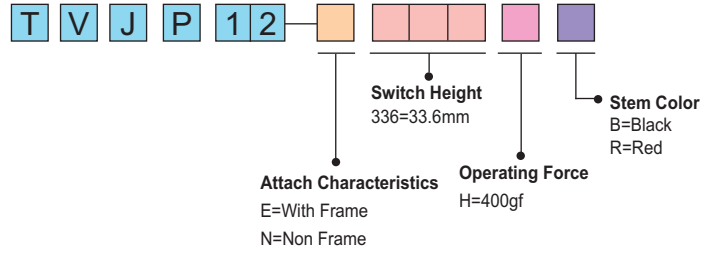
J SERIES

10.0x10.0 Washable Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Waterproof sealed structure
- 10x10mm snap-in type
- Partial output terminal can be used as jumper pin
- 33.6mm long switch height

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

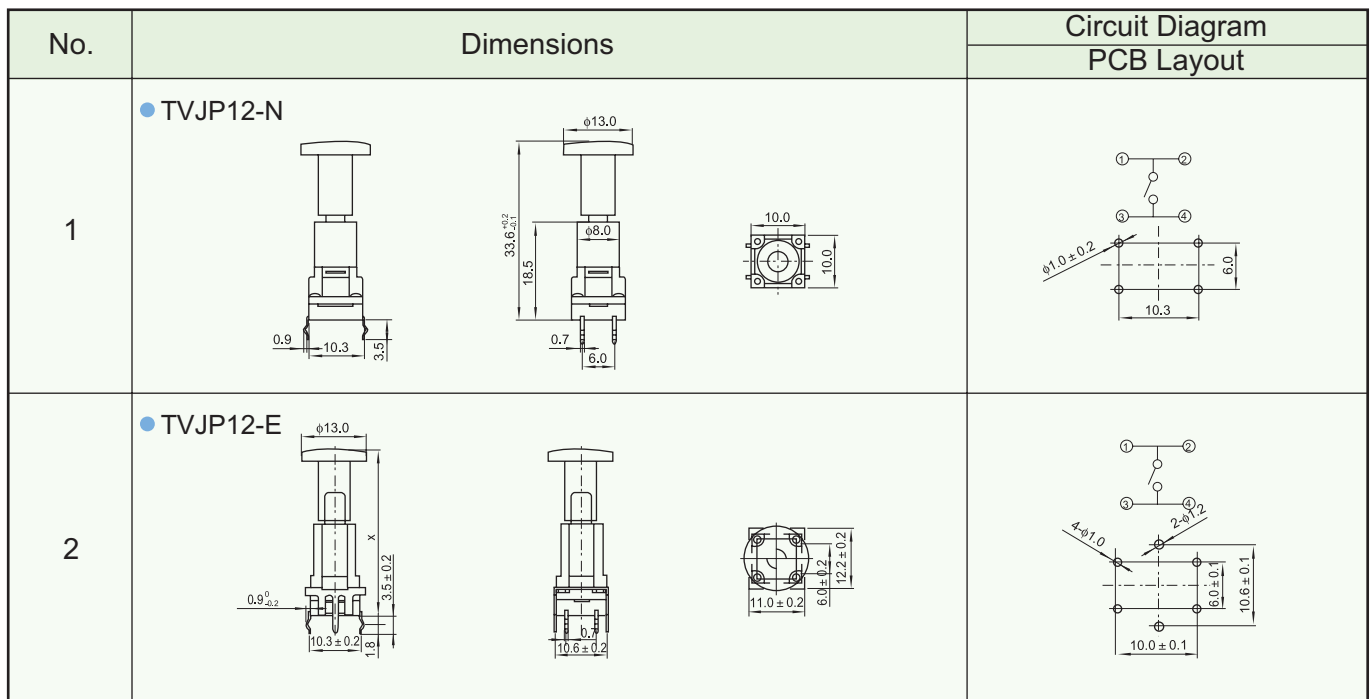
◆ SPECIFICATION

| Items | | Standard | Items | | Standard |
|-----------------------------|-----------------------|--------------------|------------------------|-----------------|-------------------|
| Operating temperature range | | -20°C to +70°C | Durability | Lifetime | B:C=100,000Cycles |
| Electrical performance | Rating | 50mA, 12V DC | Mechanical performance | Operating force | H:400gf ± 70gf |
| | Insulation resistance | 100MΩ min. 100V DC | | Travel | 0.40 ± 0.2mm |
| | Dielectric strength | 250V AC for 1 min. | | | |
| | Contact resistance | 100mΩ max. | | | |

◆ WATER RESISTING PERFORMANCE

| Items | Model | Vertical type | Horizontal type |
|----------------------|-------|---------------|-----------------|
| Temperature of water | | 60°C | 60°C |
| Depth of water | | 10cm | 10cm |
| Immersion duration | | 240h | 1h |

◆ DIAGRAM





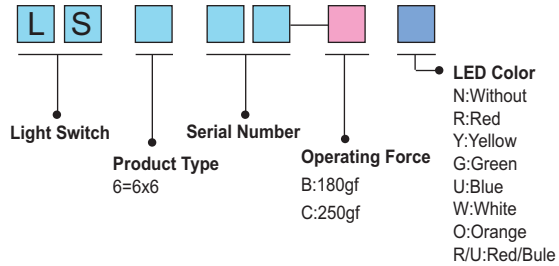
J SERIES

6.0x6.0 Led Built-in Type

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Waterproof sealed structure
- 6x6mm snap-in type
- With LED
- Partial output terminal can be used as jumper pin

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--------------------|
| Operating temperature range | | -25℃ to +85℃ |
| Electrical performance | Rating | 100mA. 30V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B:C=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● LS615</p> | |



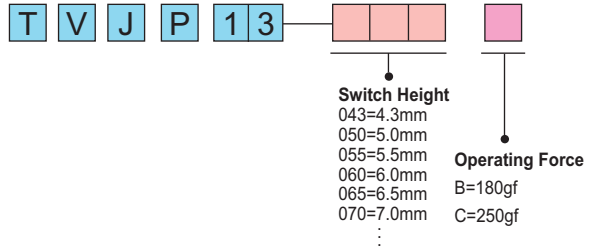
J SERIES

6.0x6.0 Washable Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Waterproof sealed structure
- 6x6mm snap-in type
- Partial output terminal can be used as jumper pin

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--------------------|
| Operating temperature range | | -30℃ to +85℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B:C=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram | |
|-----|------------------|-----------------|--|
| | | PCB Layout | |
| 1 | ● TVJP13 | H | |
| | | 4.3 | |
| | | 5.0 | |
| | | 5.5 | |
| | | 6.0 | |
| | | 6.5 | |
| | | 7.0 | |
| | | 7.5 | |
| | | 8.0 | |
| | | 8.5 | |
| 9.0 | | | |
| 9.5 | | | |



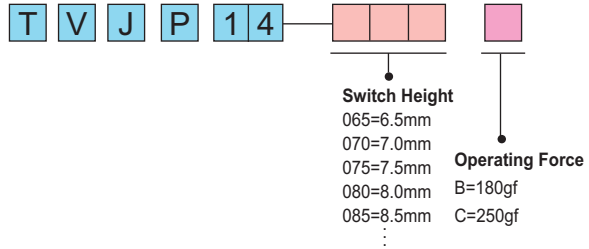
J SERIES

8.0x8.0 Washable Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Waterproof sealed structure
- 8x8mm snap-in type
- Partial output terminal can be used as jumper pin

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--------------------|
| Operating temperature range | | -30℃ to +85℃ |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B:C=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram | |
|------|--|-----------------|--|
| | | PCB Layout | |
| 1 | <ul style="list-style-type: none"> ● TVJP14 | H | |
| | | 6.5 | |
| | | 7.0 | |
| | | 7.5 | |
| | | 8.0 | |
| | | 8.5 | |
| | | 9.0 | |
| | | 9.5 | |
| | | 11.0 | |
| | | 12.0 | |
| 13.0 | | | |



J SERIES

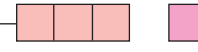
12x12 Washable Tact Switch

TACT SWITCH



HOW TO ORDER

T V J P 1 5



Switch Height
 060=6.0mm
 065=6.5mm
 070=7.0mm
 075=7.5mm
 080=8.0mm
 085=8.5mm
 150=15.0mm
 ...

Operating Force
 B=180gf
 C=250gf

◆ FEATURES

- Waterproof sealed structure
- 12x12mm snap-in type
- Partial output terminal can be used as jumper pin

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B:C=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram | | | | | | | | | |
|------|-----------------|-----------------|--|---|-----|-----|-----|-----|-----|-----|-----|
| | | PCB Layout | | | | | | | | | |
| 1 | <p>● TVJP15</p> | | | | | | | | | | |
| | | | <table border="1"> <tr><td>H</td></tr> <tr><td>6.5</td></tr> <tr><td>7.0</td></tr> <tr><td>7.5</td></tr> <tr><td>8.0</td></tr> <tr><td>8.5</td></tr> <tr><td>9.0</td></tr> <tr><td>9.5</td></tr> <tr><td>10.0</td></tr> <tr><td>11.0</td></tr> <tr><td>12.0</td></tr> </table> | H | 6.5 | 7.0 | 7.5 | 8.0 | 8.5 | 9.0 | 9.5 |
| H | | | | | | | | | | | |
| 6.5 | | | | | | | | | | | |
| 7.0 | | | | | | | | | | | |
| 7.5 | | | | | | | | | | | |
| 8.0 | | | | | | | | | | | |
| 8.5 | | | | | | | | | | | |
| 9.0 | | | | | | | | | | | |
| 9.5 | | | | | | | | | | | |
| 10.0 | | | | | | | | | | | |
| 11.0 | | | | | | | | | | | |
| 12.0 | | | | | | | | | | | |



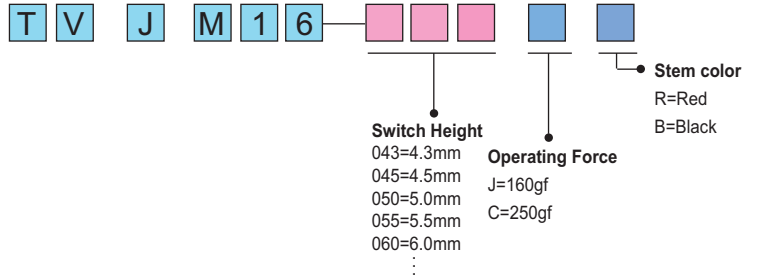
J SERIES

6.0x6.0 Washable Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- Waterproof sealed structure
- 6x6mm SMT type
- Partial output terminal can be used as jumper pin

◆ APPLICATIONS

- Major home appliances
- Distribution boards
- Storage batteries
- Office equipment

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-------------------------|
| Operating temperature range | | -25°C to +85°C |
| Electrical performance | Rating | 100mA. 30V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | AC500V(50Hz) for 1 min. |
| | Contact resistance | 50mΩ max. |
| Durability | Lifetime | J:C=100,000Cycles |
| Mechanical performance | Operating force | J:160gf C:250g |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

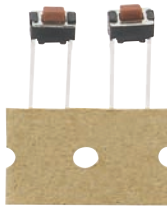
| No. | Dimensions | Circuit Diagram | | | | | | |
|-----|---|-----------------|-----|-----|-----|-----|-----|--|
| | | PCB Layout | | | | | | |
| 1 | <p>● TVJM16</p> <table border="1"> <tr><th>H</th></tr> <tr><td>4.3</td></tr> <tr><td>4.5</td></tr> <tr><td>5.0</td></tr> <tr><td>5.5</td></tr> <tr><td>6.0</td></tr> </table> | H | 4.3 | 4.5 | 5.0 | 5.5 | 6.0 | |
| H | | | | | | | | |
| 4.3 | | | | | | | | |
| 4.5 | | | | | | | | |
| 5.0 | | | | | | | | |
| 5.5 | | | | | | | | |
| 6.0 | | | | | | | | |



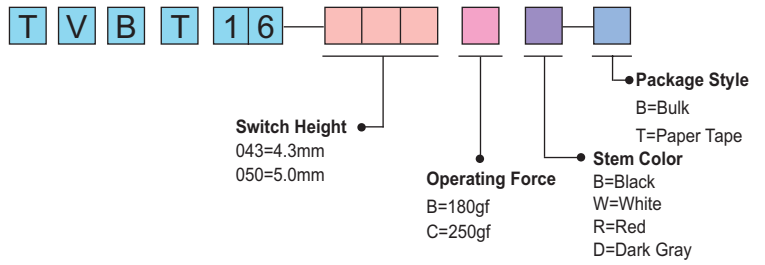
TACT SWITCH SERIES

3.5x6.0 Taping Type Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- 6x3.5mm for high density mounting
- Radial taping type
- Automatically dipped into pcb by machine

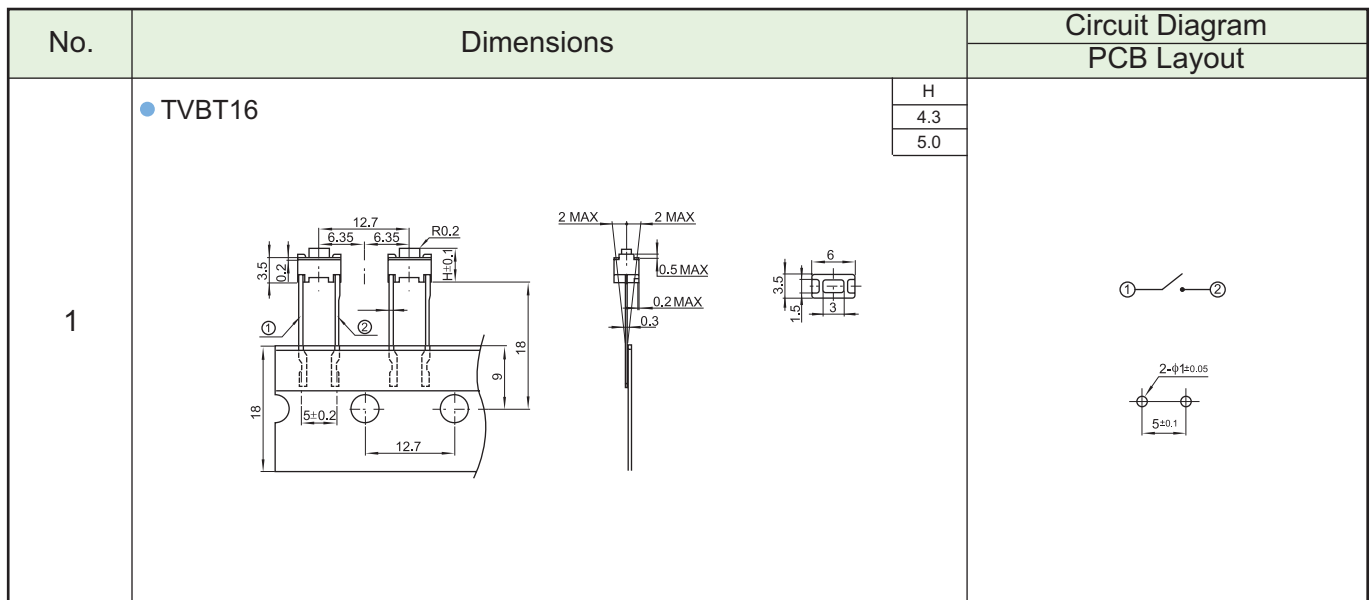
◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

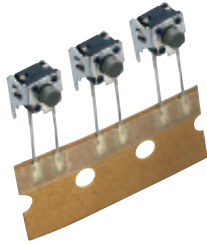
| Items | | Standard |
|-----------------------------|-----------------------|-------------------------------|
| Operating temperature range | | -30°C to +70°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B=50,000Cycles C=30,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

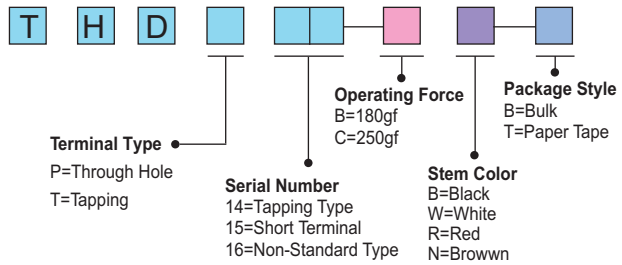


TACT SWITCH SERIES

6.0x6.0 Radial Taping Type Tact Switch



HOW TO ORDER



◆ FEATURES

- 7.4x9.25mm for high density mounting
- Radial taping type
- Automatically dipped into pcb by machine
- Horizontal push type

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|--------------------|
| Operating temperature range | | -30°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | B:C=100,000Cycles |
| Mechanical performance | Operating force | B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

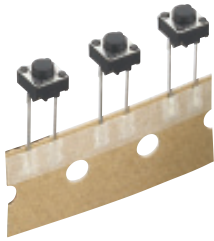
◆ DIAGRAM

| No. | Dimensions | Circuit Diagram PCB Layout |
|-----|-----------------|-------------------------------|
| 1 | <p>● THDT14</p> | |
| 2 | <p>● THDP15</p> | |
| 3 | <p>● THDP16</p> | |

TACT SWITCH SERIES

6.0x6.0 Radial Taping Type Tact Switch

TACT SWITCH



HOW TO ORDER

TVDT17

| | | | | |
|------------------------|----------------------|------------------------|-------------------|-------------------------------|
| Terminal Length | Switch Height | Operating Force | Stem Color | Package Style |
| □ = Standard Terminal | 043=4.3mm | A=90gf | B=Black | B=Bulk T=Paper Tape |
| A=3.5mm | 050=5.0mm | B=180gf | W=White | Internal Dot Mark |
| B=4.5mm | 055=5.5mm | C=250gf | R=Red | □ = Standard Life time |
| C=5.5mm | 060=6.0mm | | N=Brown | 1=High Lifetime |
| | 065=6.5mm | | | 2=Brass Cover |
| | 070=7.0mm | | | 3=High Lifetime & Brass Cover |
| | | | | 4=PET Cover |
| | | | | 5=High Lifetime & PET Cover |

◆ FEATURES

- 6x6mm for high density mounting
- Radial taping type
- Automatically dipped into pcb by machine
- Multiple button length

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -20°C to +85°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A=300,000Cycles B:C=100,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM

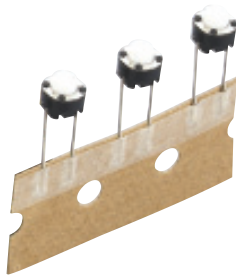
| No. | Dimensions | Circuit Diagram |
|-----|----------------|-----------------|
| | | PCB Layout |
| 1 | <p>● TVD17</p> | |



TACT SWITCH SERIES

6.0x6.0 Radial Taping Type Tact Switch

TACT SWITCH



HOW TO ORDER

T V D T 1 8

Switch Height
043=4.3mm
050=5.0mm

Operating Force
A=90gf
B=180gf
C=250gf

Package Style
B=Bulk
T=Paper Tape

Stem Color
B=Black
W=White
R=Red
N=Brown

◆ FEATURES

- 6x6mm for high density mounting
- Radial taping type
- Automatically dipped into pcb by machine
- Round terminal improves solderability

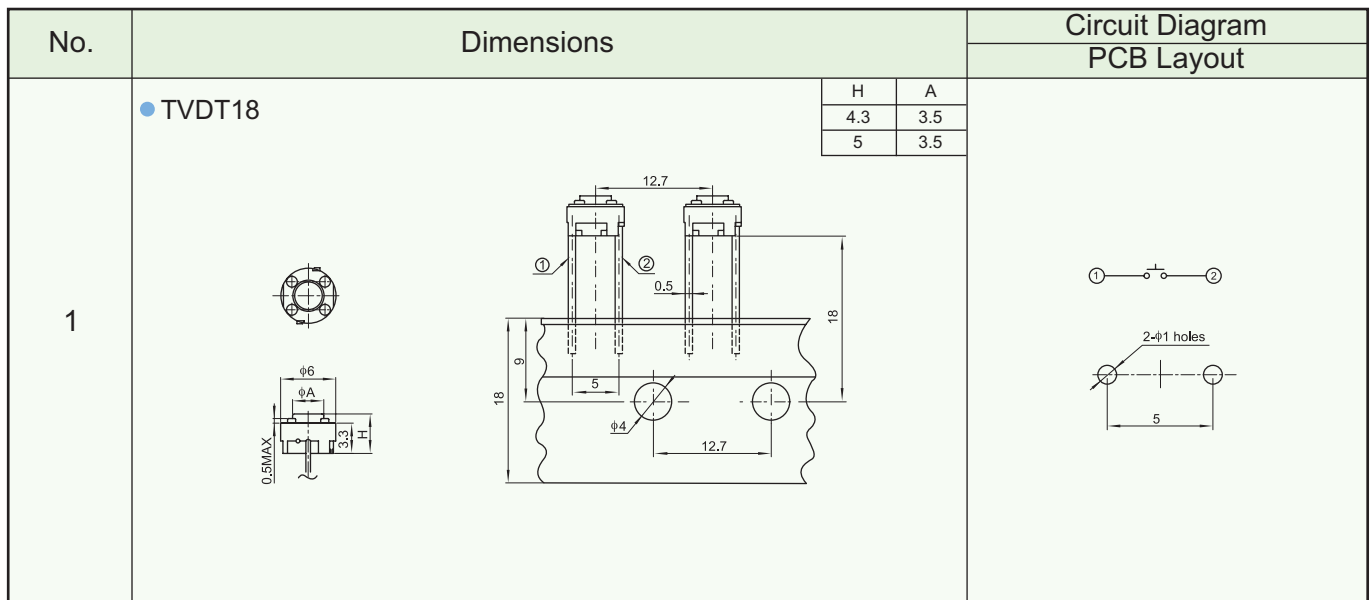
◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard |
|-----------------------------|-----------------------|-----------------------------------|
| Operating temperature range | | -40°C to +90°C |
| Electrical performance | Rating | 50mA. 12V DC |
| | Insulation resistance | 100MΩ min. 100V DC |
| | Dielectric strength | 250V AC for 1 min. |
| | Contact resistance | 100mΩ max. |
| Durability | Lifetime | A=300,000Cycles B:C=100,000Cycles |
| Mechanical performance | Operating force | A:90gf B:180gf C:250gf |
| | Travel | 0.25 ± 0.1mm |

◆ DIAGRAM



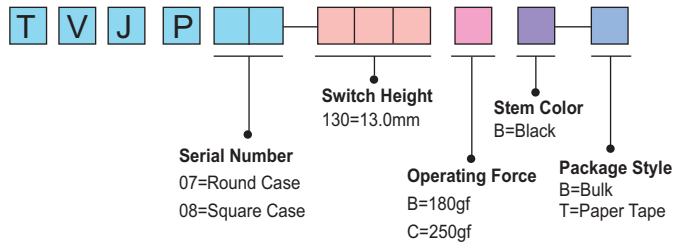
TACT SWITCH SERIES

8.0x8.0 Washable Tact Switch

TACT SWITCH



HOW TO ORDER



◆ FEATURES

- 8x8mm waterproof sealed structure
- Radial taping type
- Automatically dipped into pcb by machine
- Partial output terminal can be used as jumper pin

◆ APPLICATIONS

- Visual
- Audio
- Pro audio

◆ SPECIFICATION

| Items | | Standard | Items | | Standard |
|-----------------------------|-----------------------|--------------------|------------------------|-----------------|-------------------|
| Operating temperature range | | -40°C to +90°C | Durability | Lifetime | B:C=100,000Cycles |
| Electrical performance | Rating | 50mA. 12V DC | Mechanical performance | Operating force | B:180gf C:250gf |
| | Insulation resistance | 100MΩ min. 100V DC | | Travel | 0.25 ± 0.1mm |
| | Dielectric strength | 250V AC for 1 min. | | | |
| | Contact resistance | 100mΩ max. | | | |

◆ WATER RESISTING PERFORMANCE

| | |
|----------------------|------|
| Temperature of water | 60°C |
| Depth of water | 10cm |
| Immersion duration | 240h |

◆ DIAGRAM

| No. | Dimensions | Circuit Diagram |
|-----|------------|-----------------|
| | | PCB Layout |
| 1 | | |
| 2 | | |