

Tact Switch



TSI Series

4.7×4.7 Thinness Type Tact Switch

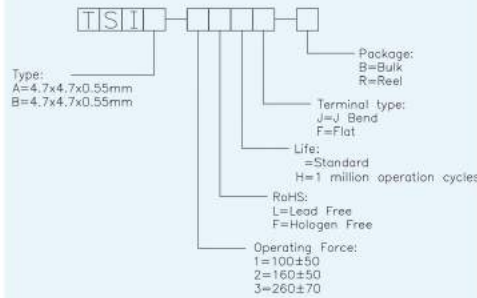


TSI Series

3.7×3.7 / 4.5×4.5 Thinness Type Tact Switch



How to order



Features

- Contributes to downsizing and lighter weight of application devices.
- Reflow solderable
- Package with a 12mm wide embossed taping.

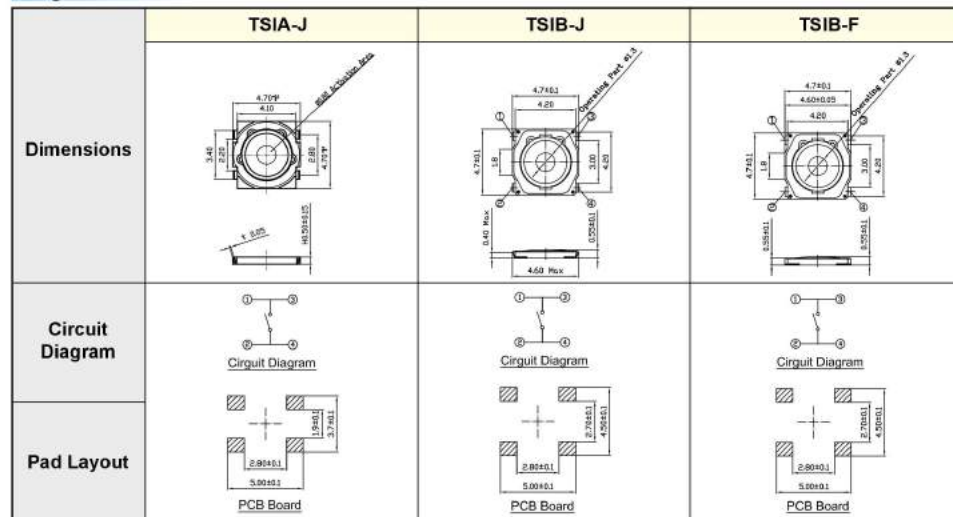
Applications

- For operating various devices such audio devices, video recorders, communication devices, cameras and automotive sets that require Low-profile and lightweight design.
- Mobile phone

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles, 500,000 Cycles, 1,000,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.2±0.1 mm

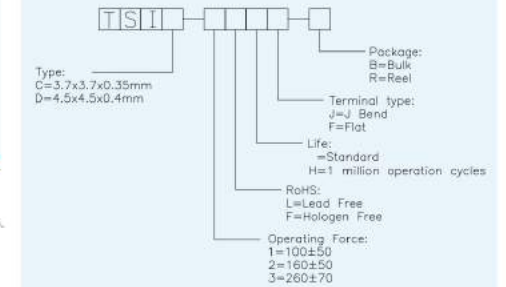
Diagram



※ Please follow drawing of Approved Sheet that catalog drawing only for reference.



How to order



Features

- Contributes to downsizing and lighter weight of application devices.
- Reflow solderable
- Package with a 12mm wide embossed taping.

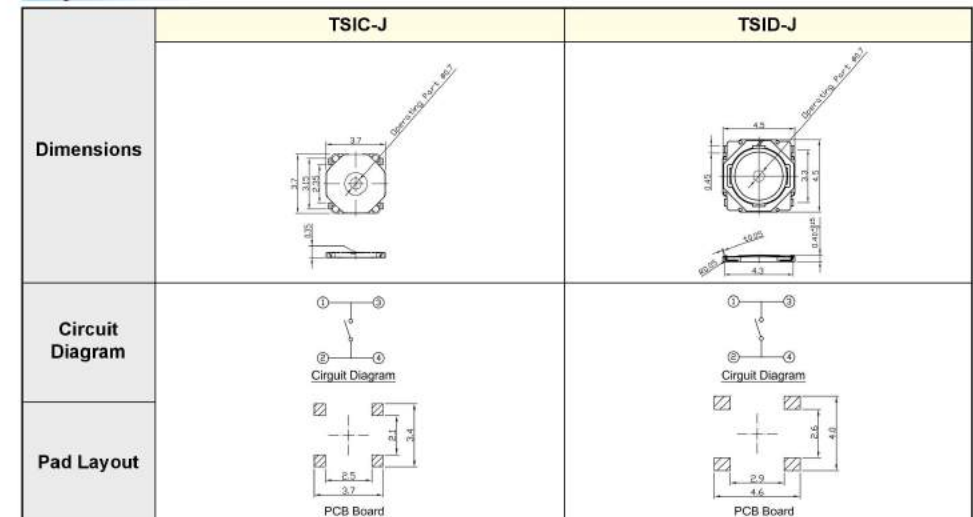
Applications

- For operating various devices such audio devices, video recorders, communication devices, cameras and automotive sets that require Low-profile and lightweight design.
- Mobile phone

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles, 500,000 Cycles, 1,000,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.2±0.1 mm

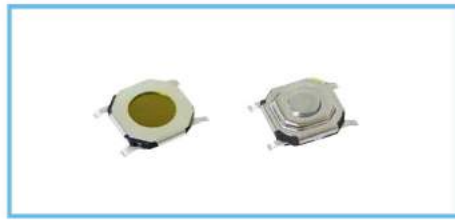
Diagram



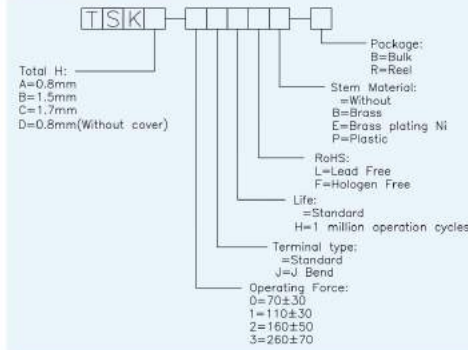
※ Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSK Series

5.2×5.2 SMD Single Key Tact Switch



How to order



Features

- 5.2×5.2mm dimensions suitable for high density mounting.
- Flat type with 0.8mm height in pursuit, for thin design.
- "With stem" type in pursuit for easier use.
- Contact sealed construction offers a highly reliable switch.
- Reflow solderable.
- Packaged with a 12mm wide embossed taping.

Applications

- For operating various electronic devices such as audio devices, video recorders, communication devices, cameras, automotive sets, electric home appliances, etc

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles, 500,000 Cycles, 1,000,000 Cycles
Mechanical performance	Operating Force	0: 70±30gf ; 1: 110±30gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

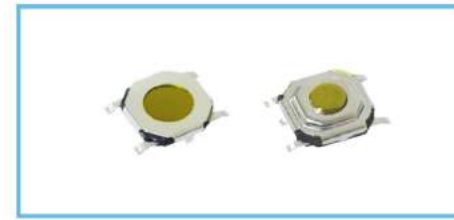
Diagram

	TSKA	TSKB	TSKC	TSKD
Dimensions				
Circuit Diagram				
Pad Layout				

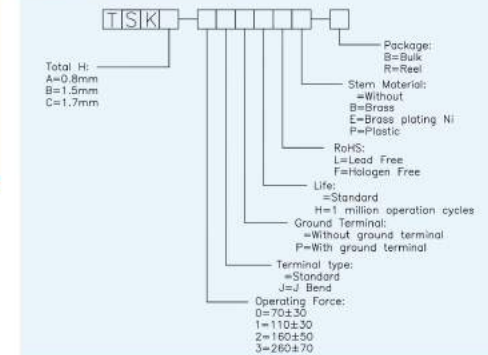
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSK-P Series

5.2×5.2 SMD Single Key Tact Switch With Ground Terminal



How to order



Features

- 5.2×5.2mm dimensions suitable for high density mounting.
- Flat type with 0.8mm height in pursuit, for thin design.
- "With stem" type in pursuit for easier use.
- Contact sealed construction offers a highly reliable switch.
- Reflow solderable.
- Packaged with a 12mm wide embossed taping.

Applications

- For operating various electronic devices such as audio devices, video recorders, communication devices, cameras, automotive sets, electric home appliances, etc

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles, 500,000 Cycles, 1,000,000 Cycles
Mechanical performance	Operating Force	0: 70±30gf ; 1: 110±30gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram

	TSKA-P	TSKB-P	TSKC-P
Dimensions			
Circuit Diagram			
Pad Layout			

* Please follow drawing of Approved Sheet that catalog drawing only for reference.

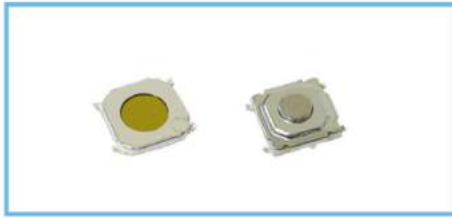
TSK-J Series

5.0×5.0 SMD Single Key Tact Switch

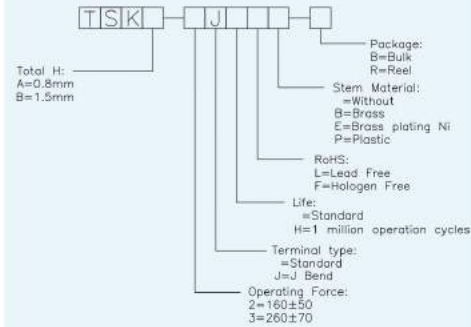


TSK-JP Series

5.0×5.0 SMD Single Key Tact Switch With Ground Terminal



How to order



Features

- 5.0×5.0mm dimensions suitable for high density mounting.
- Flat type with 0.8mm height in pursuit, for thin design.
"With stem" type in pursuit for easier use.
- Contact sealed construction offers a highly reliable switch.
- Reflow solderable.
- Packaged with a 12mm wide embossed taping.

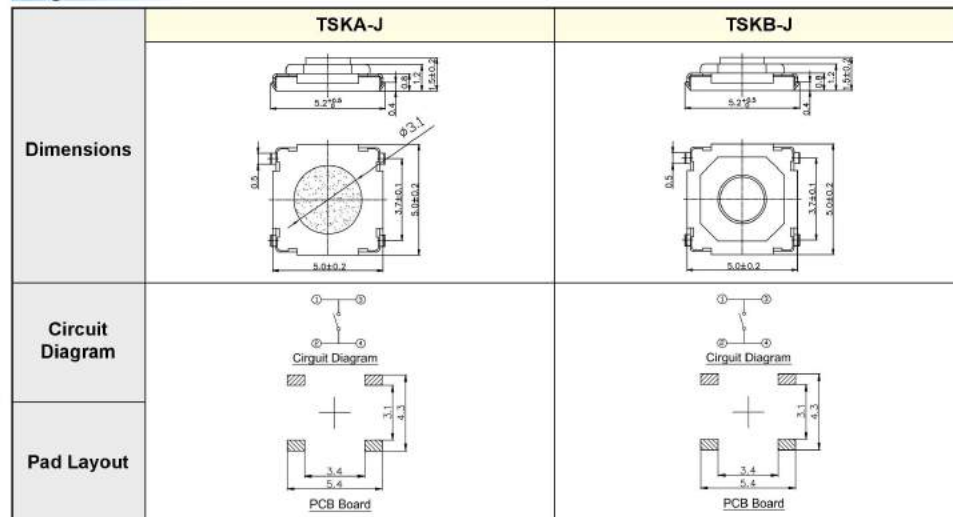
Applications

- For operating various electronic devices such as audio devices, video recorders, communication devices, cameras, automotive sets, electric home appliances, etc

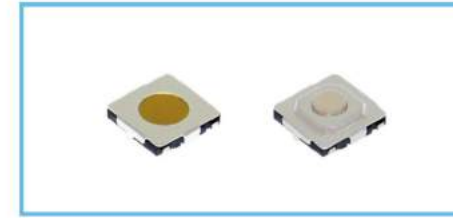
Specification

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles, 1,000,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

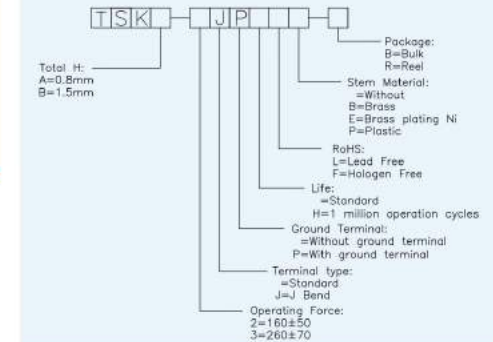
Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.



How to order



Features

- 5.0×5.0mm dimensions suitable for high density mounting.
- Flat type with 0.8mm height in pursuit, for thin design.
"With stem" type in pursuit for easier use.
- Contact sealed construction offers a highly reliable switch.
- Reflow solderable.
- Packaged with a 12mm wide embossed taping.

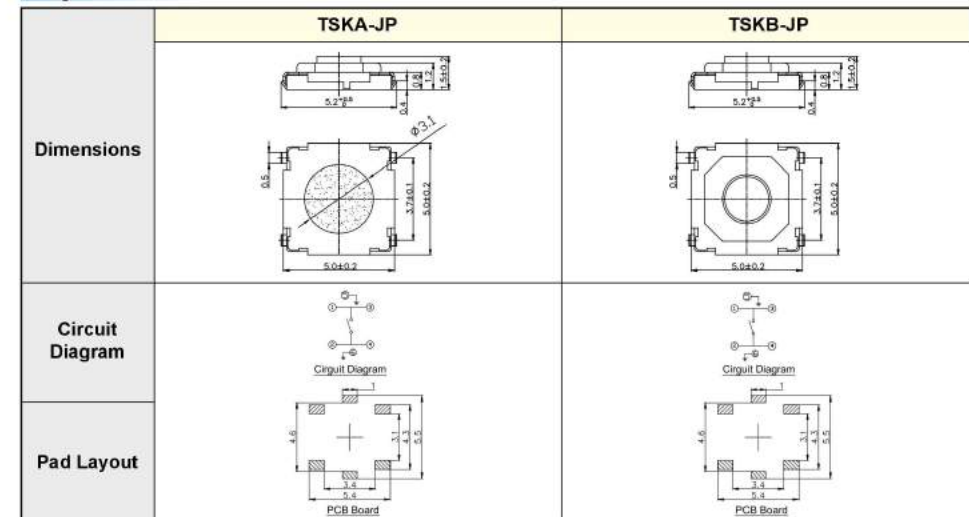
Applications

- For operating various electronic devices such as audio devices, video recorders, communication devices, cameras, automotive sets, electric home appliances, etc

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles, 1,000,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

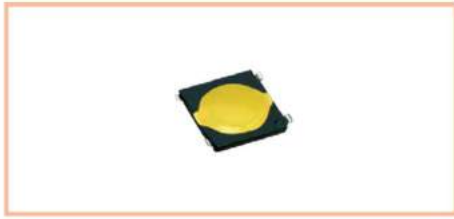
TSIK Series

2.9×2.4 Low-Height Miniature Type Tact Switch

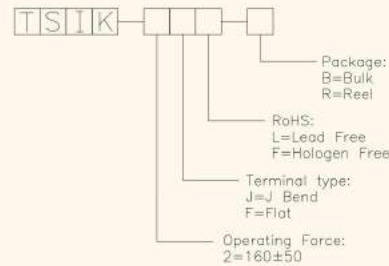


TSSK Series

3.35×3.35 Miniature Type Tact Switch



How to order



Features

- Smallest footprint
- Smallest thickness
- High number of cycles within the smallest packaging

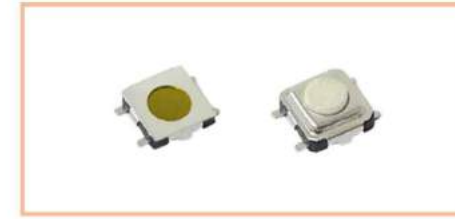
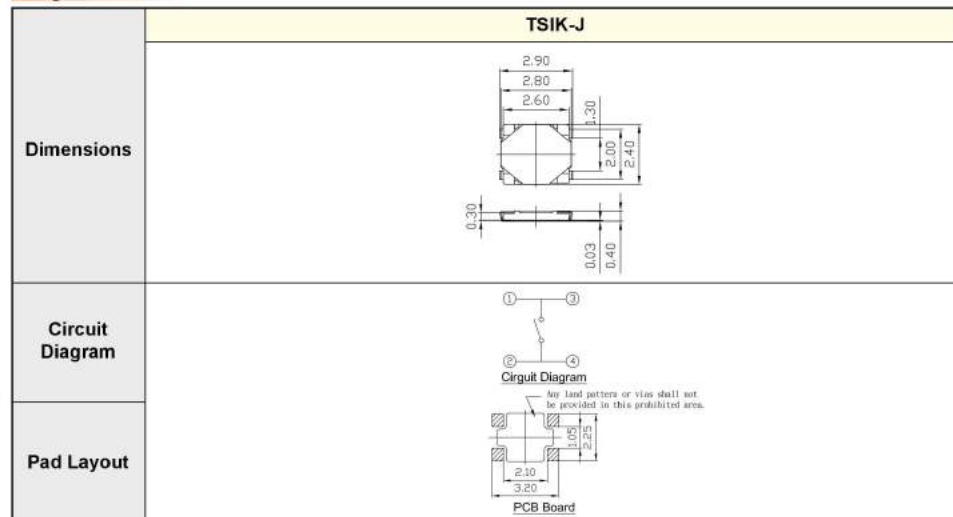
Applications

- Mobile Phones · Hearing Aids
- MP3 accessories · Bluetooth Headset

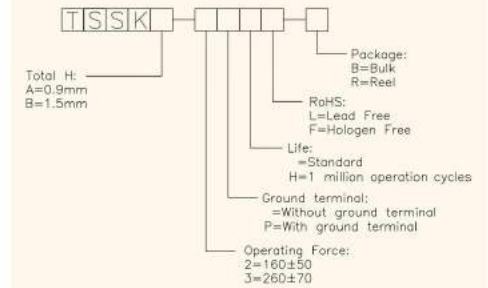
Specification

Items		Standard
Operating Temperature Range		-20°C to +70°C
Electrical performance	Rating	50mA 12V DC
	Insulation Resistance	100MΩ Min. 100V DC
	Dielectric Strength	100V AC for 1 min (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf
	Travel	0.10 +0.10/-0.05 mm

Diagram



How to order



Features

- Improve mounting density of components on PC board.
- Reflow solderable.
- Contacts are completely sealed, enhancing reliability.
- Available with ground terminal for electrostatic discharge.
- Packaged with a 12mm wide embossed taping.

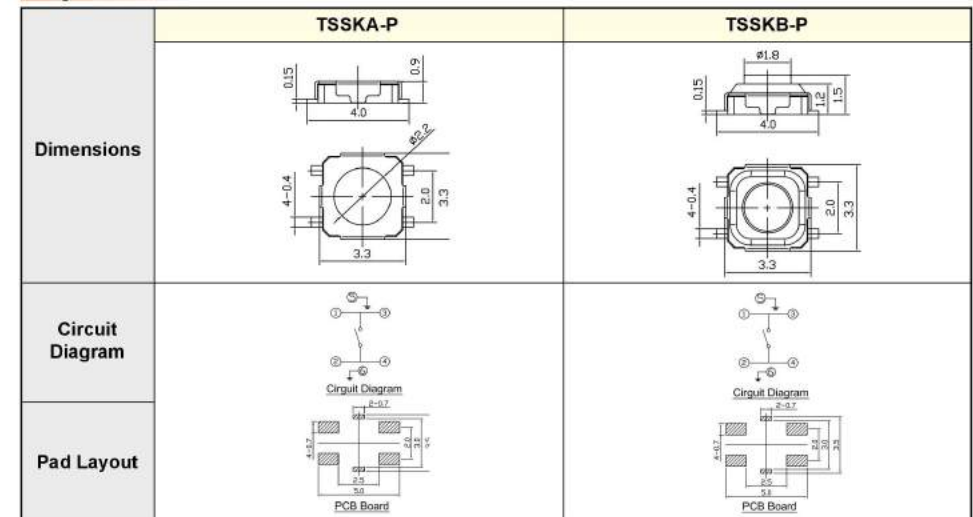
Applications

- For operating various mobile devices
- For operating various devices that require high density mounting such as mobile phones, communication devices, compact electronic devices

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles; 1,000,000 Cycles.
Mechanical performance	Operating Force	2: 160±50gf; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

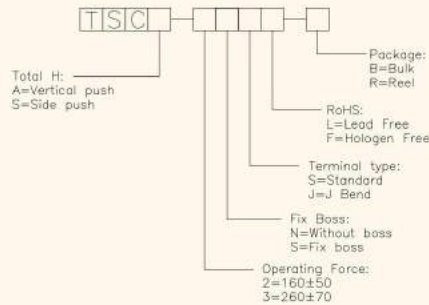
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSC Series

3.5×3.0 Miniature Type Horizontal Push & Vertical Push Tact Switch



How to order



Features

- Improve mounting density of components on PC board.
- Reflow solderable.
- Sharp "click" feel with a positive tactile feedback.
- Packaged with a 12mm wide embossed taping.

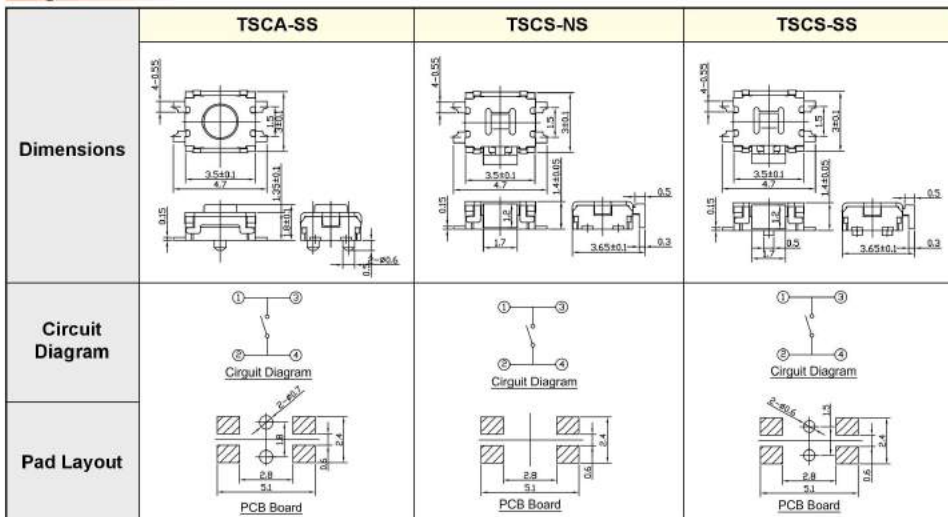
Applications

- Portable audio
- Mobile phones and personal digital assistants
- Operation of various digital devices

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	50,000 Cycles; 100,000 Cycles.
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



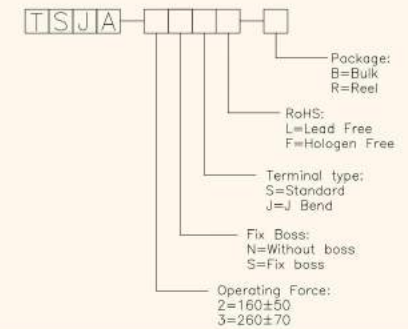
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSJ Series

3.9×2.9 Miniature Type Tact Switch



How to order



Features

- Improve mounting density of components on PC board.
- Reflow solderable.
- Contacts are completely sealed, enhancing reliability.
- Packaged with a 12mm wide embossed taping.

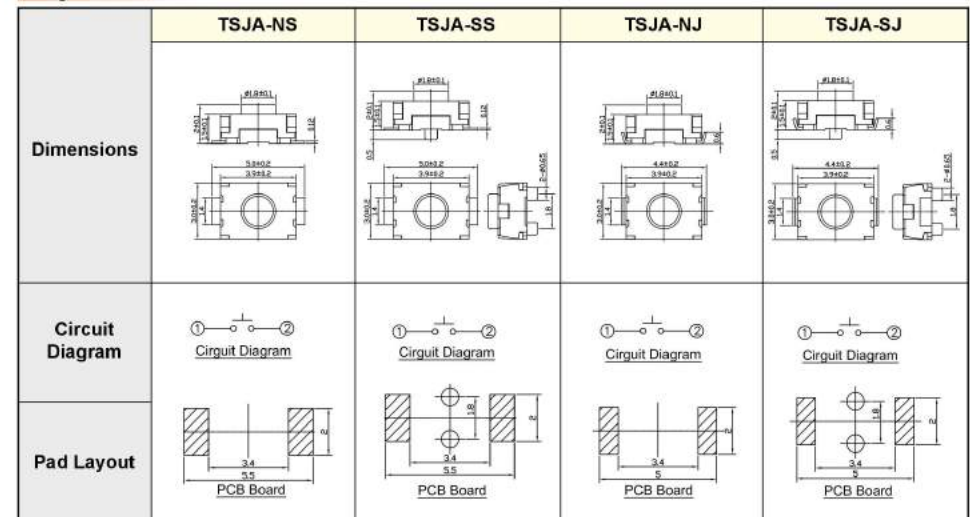
Applications

- Portable audio
- Mobile phones and personal digital assistants
- Operation of various digital devices

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles.
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

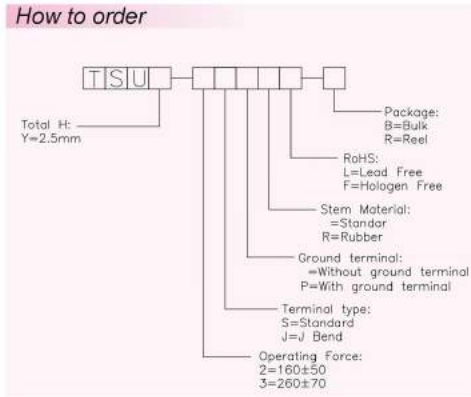
Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSU Series

6.0×3.7 SMD Tact Switch



Features

- Highly reliable contacts sealed structure.
- Larger top surface of stem improves mounting speed.
- Reflow solderable.
- Packaged with a 16mm wide embossed taping.

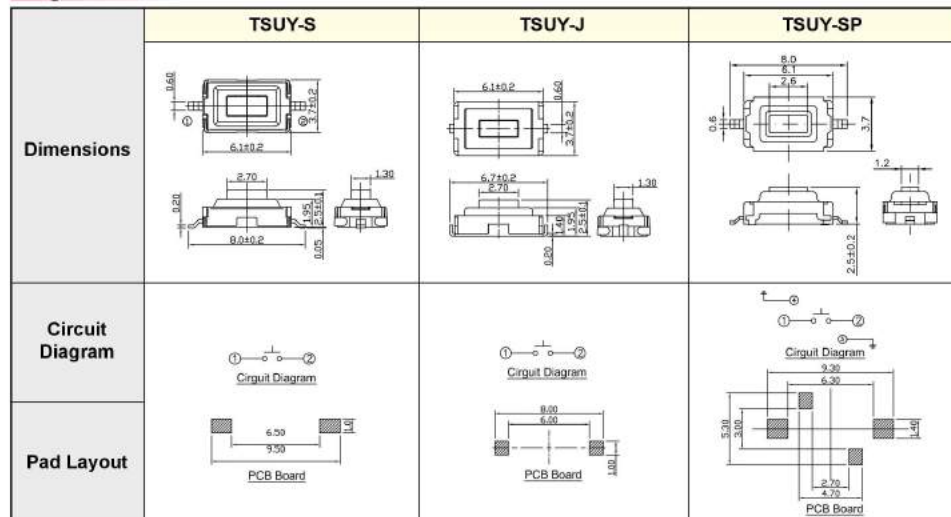
Applications

- Operating switches in all types of electronic equipment such as audio apparatus, office equipment, communication apparatus, measuring instruments, TV sets, VCRs, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	50,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

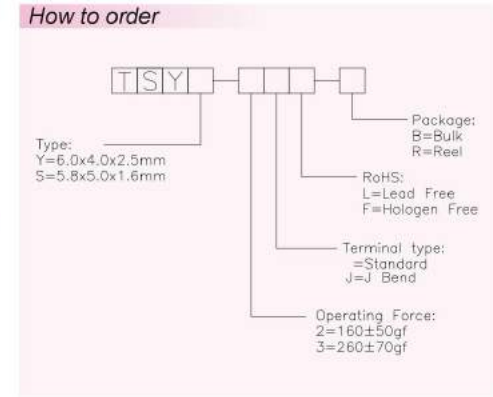
Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSY Series

6.0×3.8 / 6.2×5.0 Normal Closed Type Tact Switch



Features

- Highly reliable contacts sealed structure.
- Larger top surface of stem improves mounting speed.
- Reflow solderable.
- Packaged with a 16mm wide embossed taping.

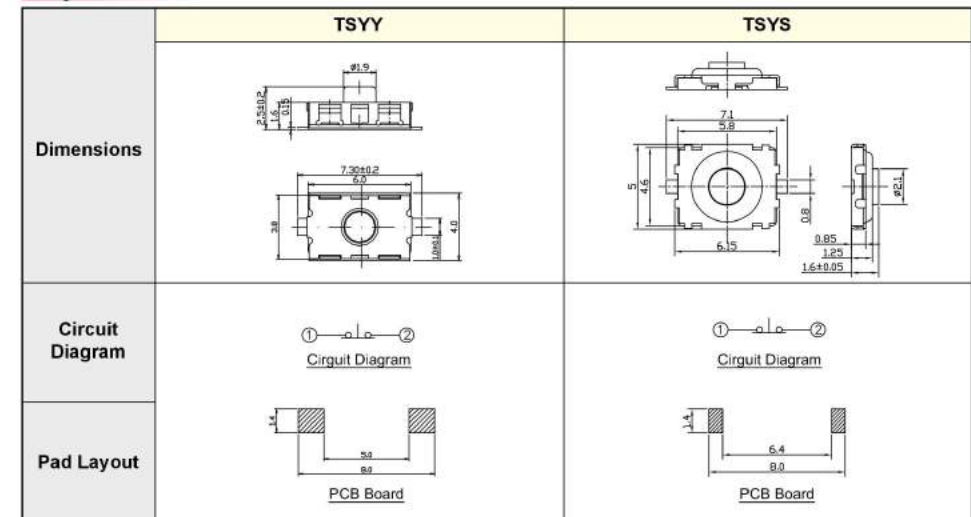
Applications

- Operating switches in all types of electronic equipment such as audio apparatus, office equipment, communication apparatus, measuring instruments, TV sets, VCRs, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	TSYY: 50,000 Cycles ; TSYS: 100,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	TSYY: 0.4±0.2mm ; TSYS: 0.25 + 0.2 / -0.1 mm

Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSH Series

6.0×3.5 Rectangle Shape Tact Switch

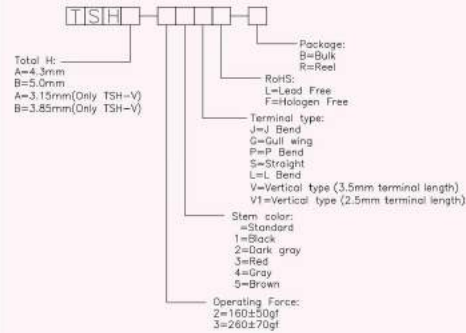


TSH Series

6.0×4.3 / 5.0 Rectangle Shape Tact Switch



How to order



Features

- Reflow solderable
- Sharp "click" feel with a positive tactile feedback.
- Packaged with a 24mm wide embossed taping.

Applications

- Operating switches in all types of electronic equipment such as audio apparatus, office equipment, communication apparatus, measuring instruments, TV sets, VCRs, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	30,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

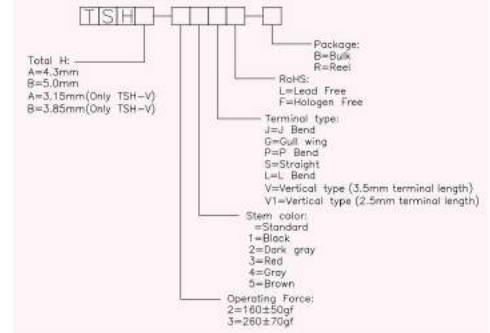
Diagram

	TSH-J	TSH-G	TSH-P
Dimensions			
Circuit Diagram			
Pad Layout			

* Please follow drawing of Approved Sheet that catalog drawing only for reference.



How to order



Features

- Reflow solderable
- Sharp "click" feel with a positive tactile feedback.
- Packaged with a 24mm wide embossed taping.

Applications

- Operating switches in all types of electronic equipment such as audio apparatus, office equipment, communication apparatus, measuring instruments, TV sets, VCRs, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	30,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram

	TSH-S	TSH-L	TSH-V	TSH-V1
Dimensions				
Circuit Diagram				
Pad Layout				

* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSCX Series

3.0×2.5 Miniature Type Side Push Tact Switch



Features

- Suitable for high-density mounting.
- Vertical type capable of vertical operation to the PC board.
- Contacts are completely sealed, enhancing reliability.
- Packaged with a 16mm wide embossed taping.

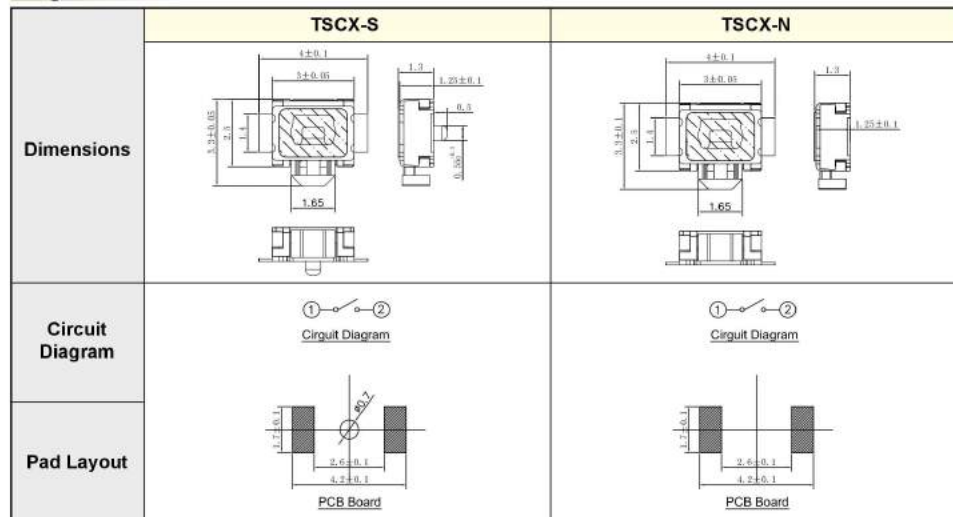
Applications

- Portable devices
- Mobile phones and personal digital assistants.
- Operation of various digital devices.

Specification

Items	Standard	
Operating Temperature Range	-20°C to +70°C	
Electrical performance	Rating	50mA, 12V DC
	Insulation Resistance	100MΩ Min. 100VDC
	Dielectric Strength	250V AC for 1 min 50Hz
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	50,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.13±0.07mm

Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSCM Series

3.9×2.9 Miniature Type Side Push Tact Switch



Features

- Suitable for high-density mounting.
- Vertical type capable of vertical operation to the PC board.
- Contacts are completely sealed, enhancing reliability.
- Packaged with a 16mm wide embossed taping.

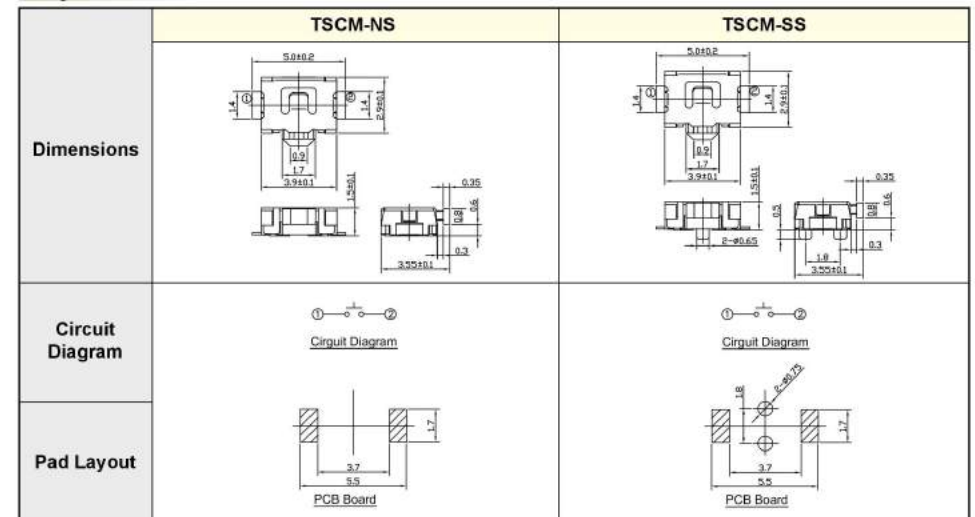
Applications

- Portable devices
- Mobile phones and personal digital assistants.
- Operation of various digital devices.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	50,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSCF Series

4.7×3.5 Side Push Tact Switch



Features

- Suitable for high-density mounting.
- Vertical type capable of vertical operation to the PC board.
- Contacts are completely sealed, enhancing reliability.
- Packaged with a 16mm wide embossed taping.

Applications

- Portable devices
- Mobile phones and personal digital assistants.
- Operation of various digital devices.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	50,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram

	TSCF-NS	TSCF-SS	TSCF-NJ	TSCF-SJ
Dimensions				
Circuit Diagram				
Pad Layout				

* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TS4V Series

4.5×3.4 Side Push Tact Switch



Features

- Vertical type capable of vertical operation to the PCB board.
- Packaged with a 16mm wide embossed taping.

Applications

- Portable devices
- Mobile phones and personal digital assistants.
- Operation of various digital devices.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram

	TS4V
Dimensions	
Circuit Diagram	
Pad Layout	

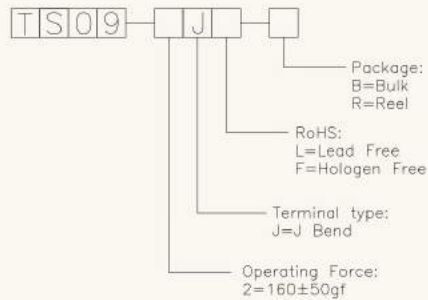
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TS09 Series

4.5×3.5 Miniature Type Tact Switch, IP67 Waterproof



How to order



Features

- This horizontal-type switch allows the side of the soldered PCB to be pushed.
- The switch supports reflow soldering and is totally waterproof
- Packaged with a 12mm wide embossed taping.

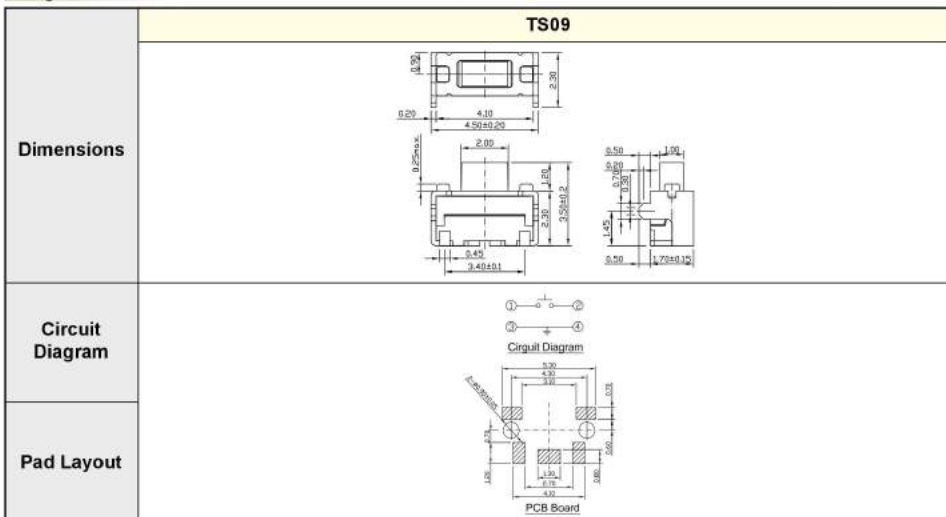
Applications

- Mobile terminal equipment, TV, VCR, cameras, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	50,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf
	Travel	0.2±0.1mm

Diagram



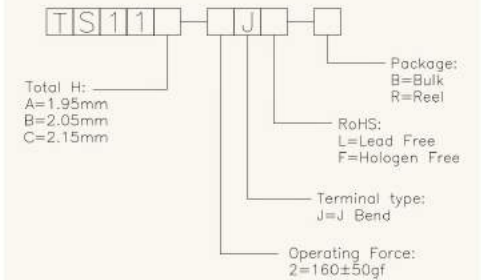
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TS11 Series

4.5×2.4 / 2.5 / 2.6 Miniature Type Tact Switch



How to order



Features

- This horizontal-type switch allows the side of the soldered PCB to be pushed.
- The switch supports reflow soldering and is totally waterproof
- Packaged with a 12mm wide embossed taping.

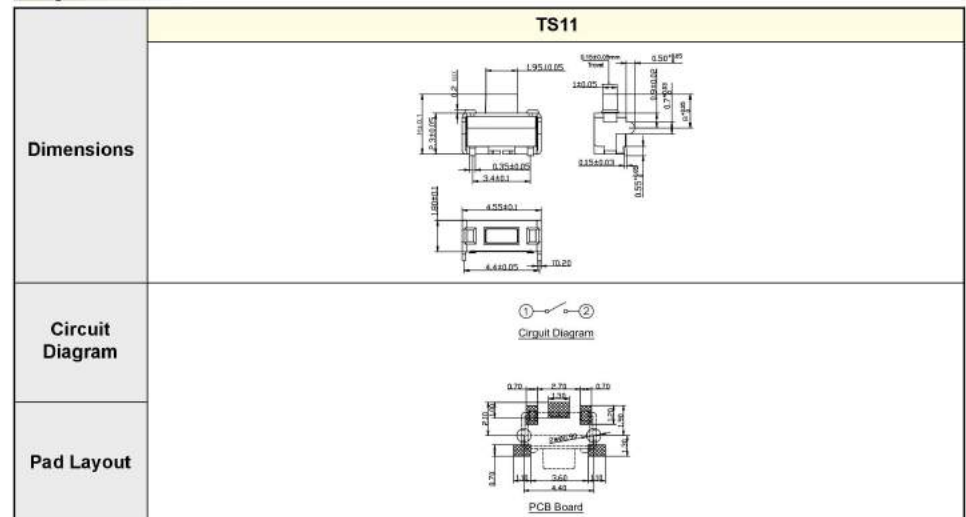
Applications

- Mobile terminal equipment, TV, VCR, cameras, etc.

Specification

Items		Standard
Operating Temperature Range		-20°C to +70°C
Electrical performance	Rating	50mA, 12V DC
	Insulation Resistance	100MΩ
	Dielectric Strength	100V AC for 1 min 50Hz
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	50,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf
	Travel	0.15 + 0.2 / -0.1 mm

Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSSH-VS Series

4.6×3.5 Side Push Tact Switch, With Fixed Post

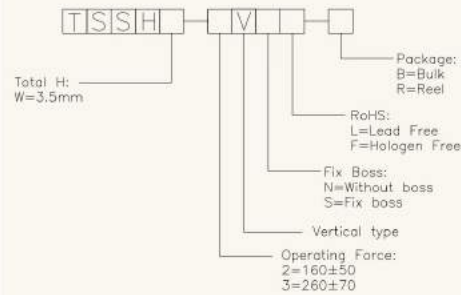


TSSH-V Series

4.6×3.5 Side Push Tact Switch



How to order



Features

- Improve mounting density of components on PCB board.
- Reflow solderable.
- Package with 12mm wide embossed taping.

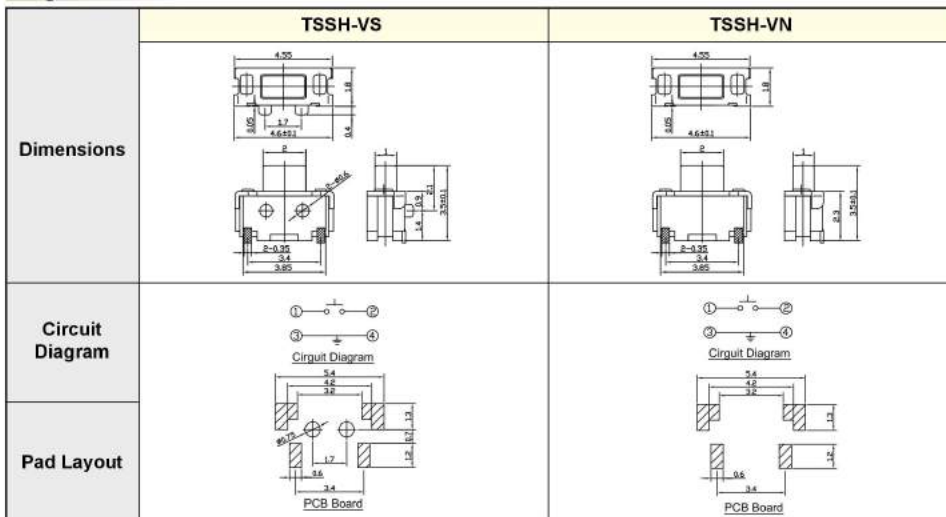
Applications

- For operating various mobile devices.
- For operating various devices that require high density mounting such as mobile phones, communication devices, compact electronic devices.

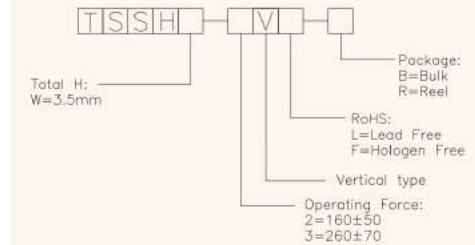
Specification

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	30,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



How to order



Features

- Improve mounting density of components on PCB board.
- Reflow solderable.
- Package with 12mm wide embossed taping.

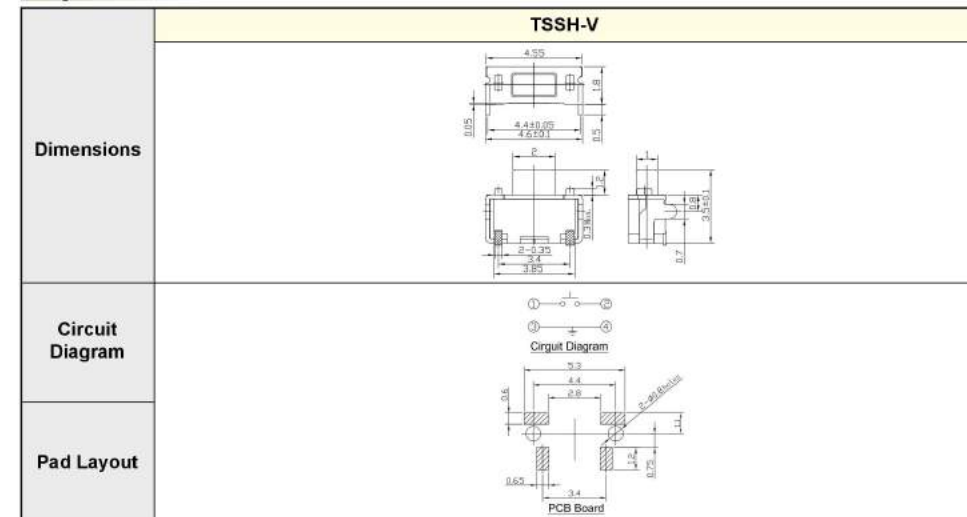
Applications

- For operating various mobile devices.
- For operating various devices that require high density mounting such as mobile phones, communication devices, compact electronic devices.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	30,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram

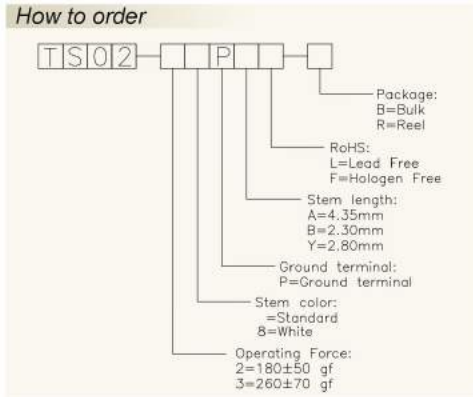


* Please follow drawing of Approved Sheet that catalog drawing only for reference.

* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TS02 Series

6.0×7.4 Side Push Tact Switch



Features

- Improve mounting density of components on PCB board.
- Reflow solderable.
- Package with 24mm wide embossed taping.

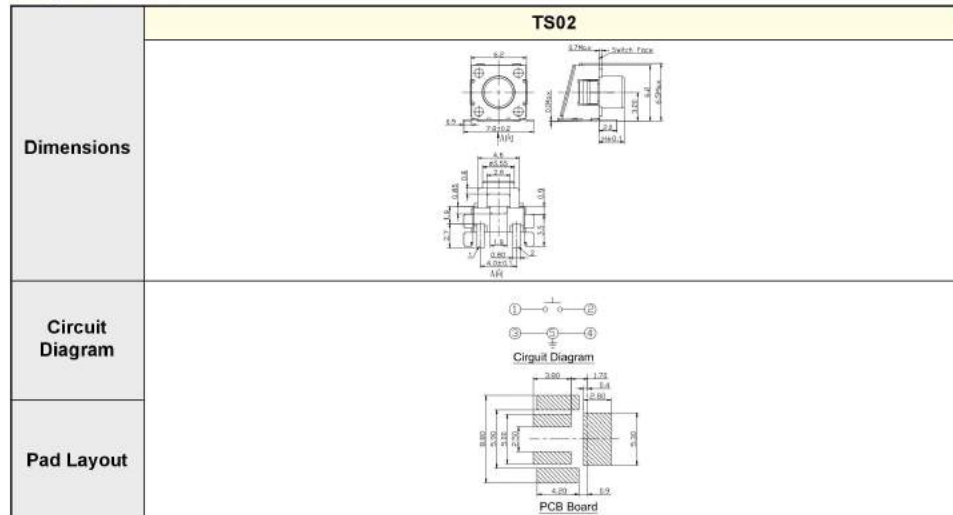
Applications

- For operating various mobile devices.
- For operating various devices that require high density mounting such as mobile phones, communication devices, compact electronic devices.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	200,000 Cycles
Mechanical performance	Operating Force	2: 180±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

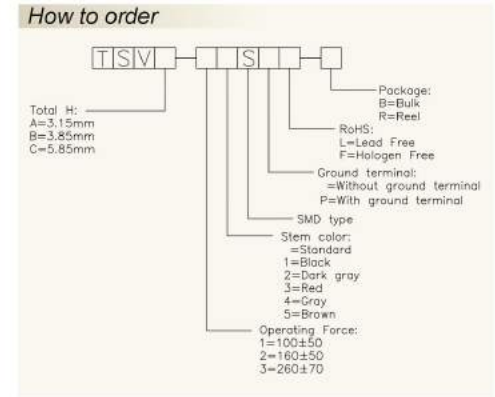
Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSV-S Series

6.0×3.15~5.85 Side Push Tact Switch



Features

- Improve mounting density of components on PCB board.
- Reflow solderable.
- Package with 16mm wide embossed taping.

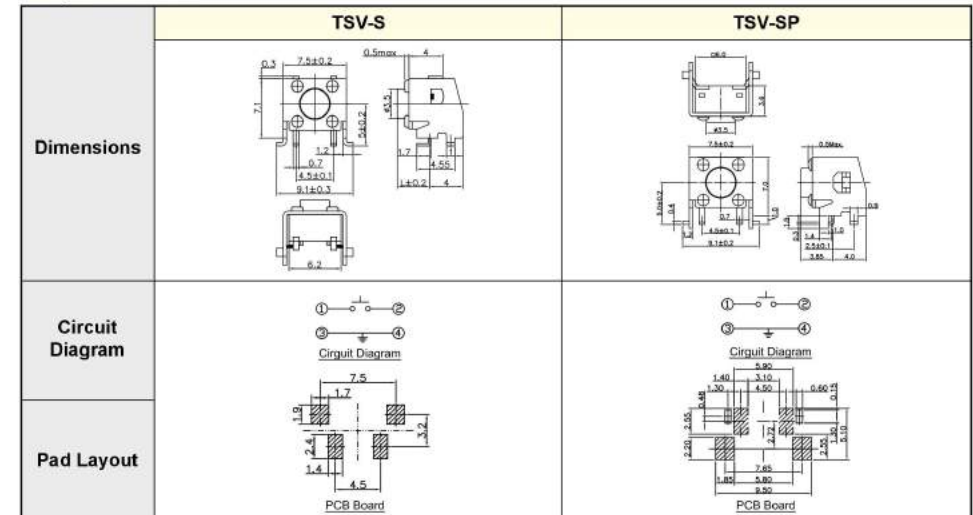
Applications

- For operating various mobile devices.
- For operating various devices that require high density mounting such as mobile phones, communication devices, compact electronic devices.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSH-VS Series

7.0×3.5 Side Push Tact Switch

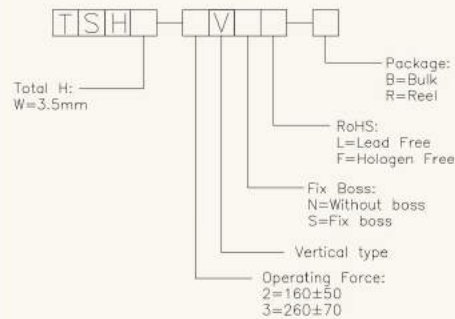


TSV Series

6.0×3.15~15.85 Side Push Tact Switch



How to order



Features

- Improve mounting density of components on PCB board.
- Reflow solderable.
- Package with 16mm wide embossed taping.

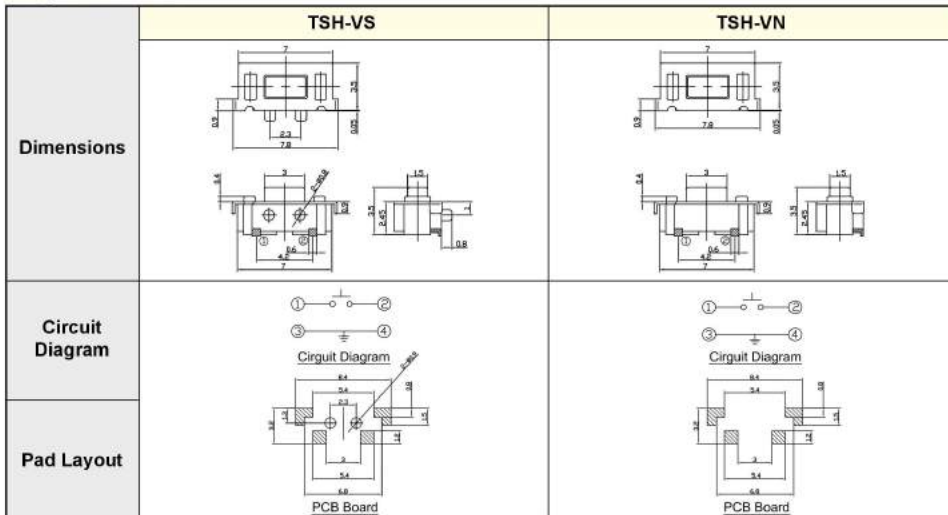
Applications

- Various portable electronic devices.
- For operating various compact electronic devices such as mobile phones and communication devices, that require high density mounting.
- For operating various MP4, MP3.

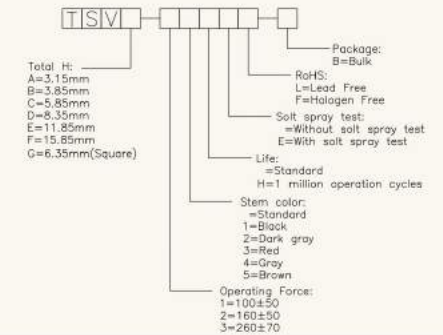
Specification

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	30,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



How to order



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Available with anti-ESD ground terminal.
- Standard knobs are available.

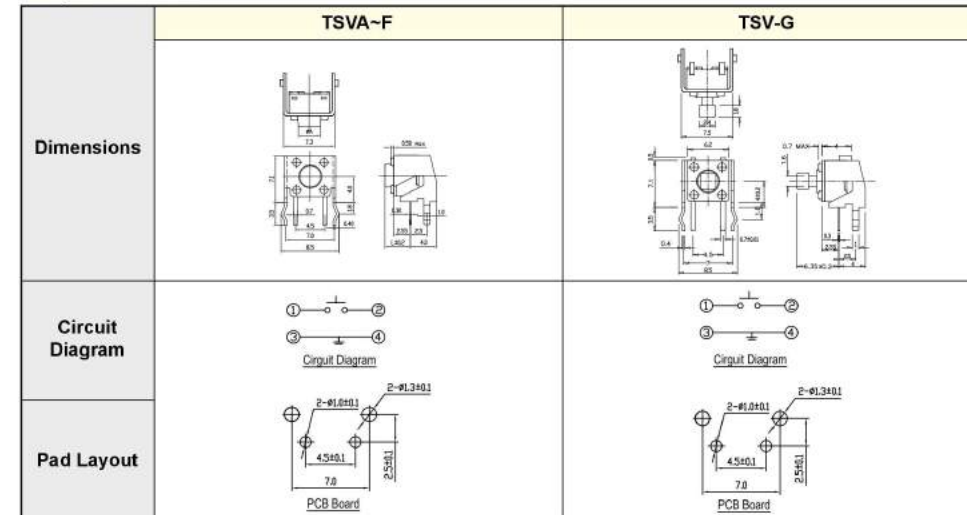
Applications

- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	10,000 Cycles ; 1,000,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

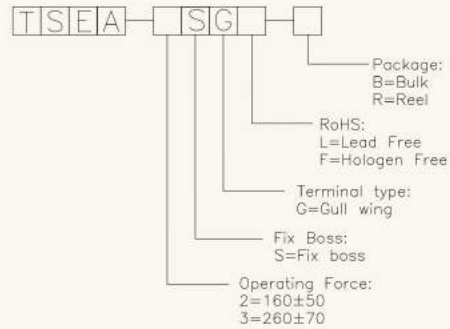
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSE-SG Series

7.7×4.0 Side Push Tact Switch



How to order



Features

- Suitable for high-density mounting.
- Vertical type capable of vertical operation to the PC board.
- Contacts are completely sealed, enhancing reliability.
- Packaged with a 16mm wide embossed taping.

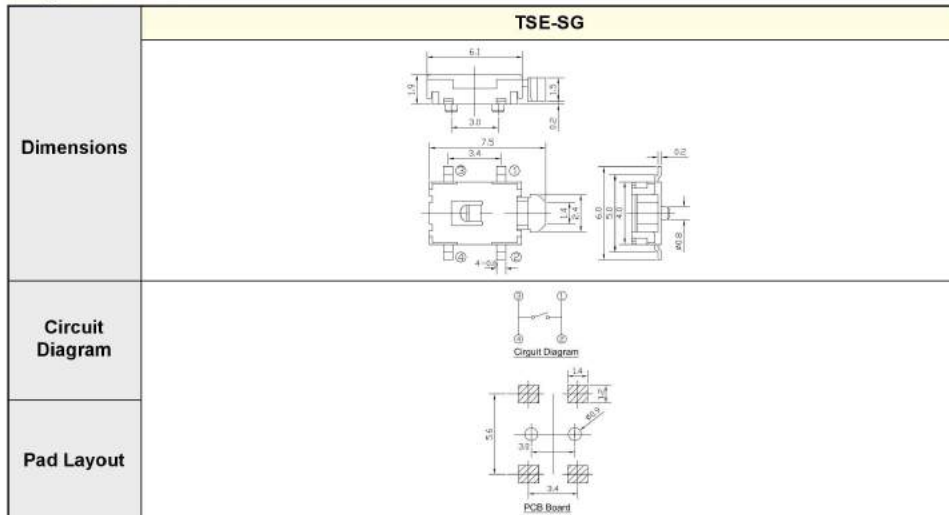
Applications

- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	50,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



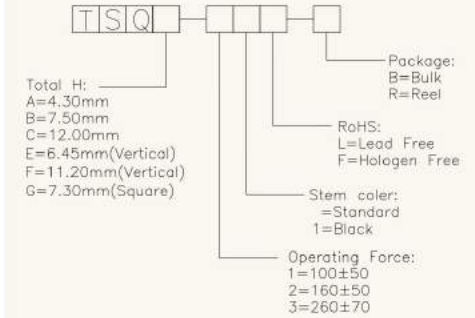
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSQ Series

12.0×12.0 Horizontal Push & Vertical Push Tact Switch



How to order



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Standard knobs are available.
- SMT Type Available.

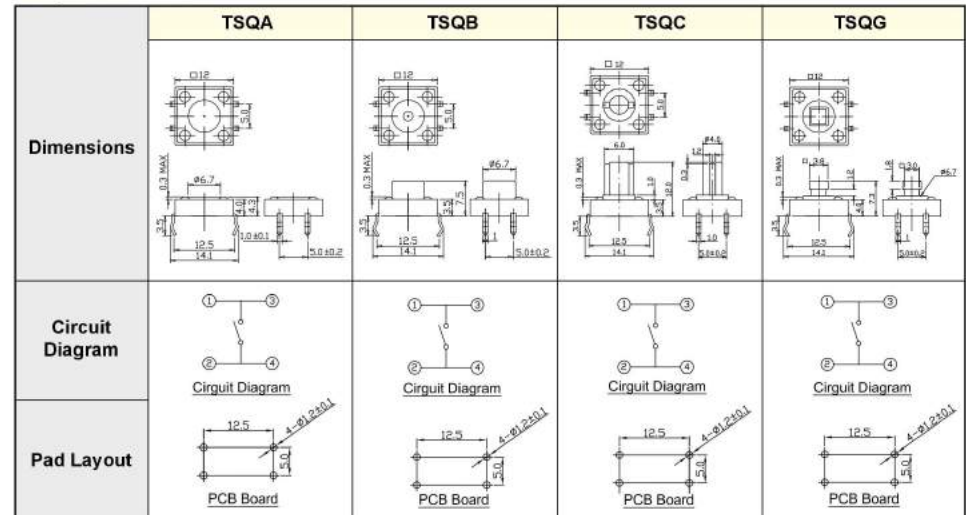
Applications

- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSQ-G Series

12.0×6.45 / 11.20 Horizontal Push & Vertical Push Tact Switch



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Standard knobs are available.
- SMT Type Available.

Applications

- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf; 2: 160±50gf; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram

	TSQ-G	TSQE	TSQF
Dimensions			
Circuit Diagram			
Pad Layout			

* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSX Series

4.5×4.5 Through Hole & SMD Tact Switch



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Standard knobs are available.

Applications

- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	50,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram

	TSX-G	TSX	TSX-S
Dimensions			
Circuit Diagram			
Pad Layout			

* Please follow drawing of Approved Sheet that catalog drawing only for reference.

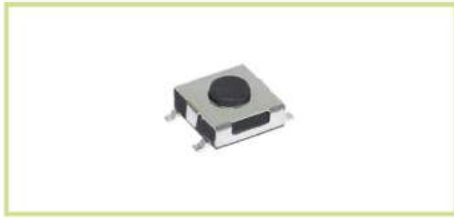
TSSZS Series

4.6×4.6 Mini Type SMD Tact Switch



TSS Series

6.0×6.0 SMD Tact Switch



Features

- Reflow solderable
- Package with a 12mm wide embossed taping.

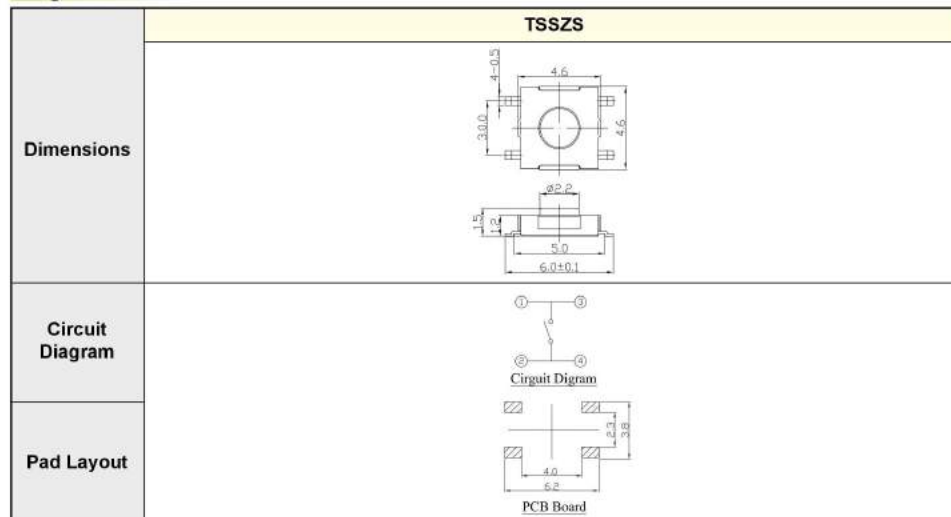
Applications

- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

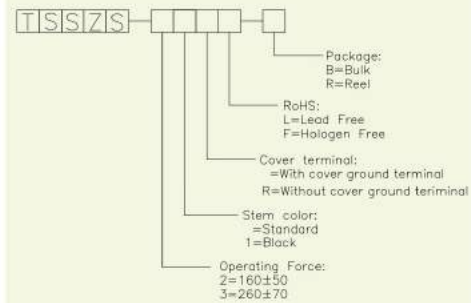
Specification

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
	Operating Force	2: 160±50gf ; 3: 260±70gf
Mechanical performance	Travel	0.25 + 0.2 / -0.1 mm

Diagram



How to order



Features

- Reflow solderable.
- Packaged with a 16mm wide embossed taping.

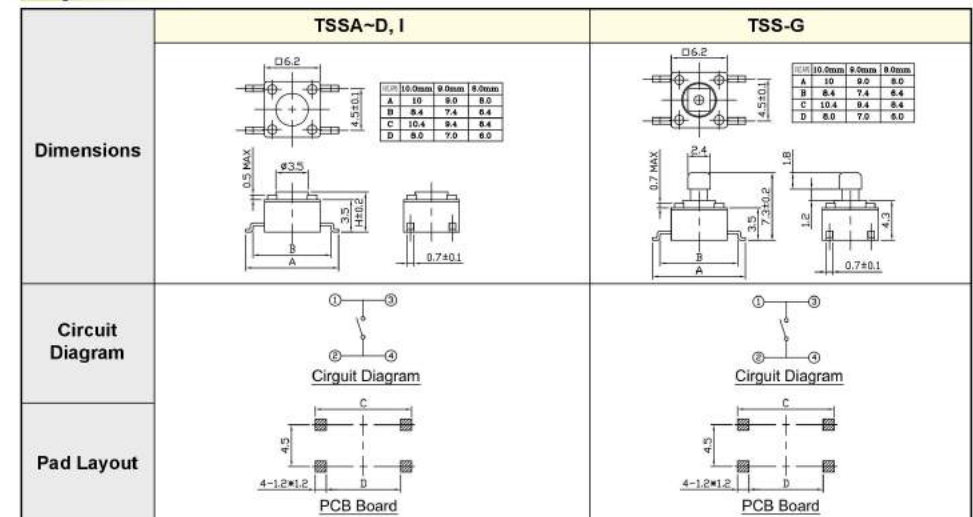
Applications

- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles ; 1,000,000 Cycles
	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
Mechanical performance	Travel	0.25 + 0.2 / -0.1 mm

Diagram

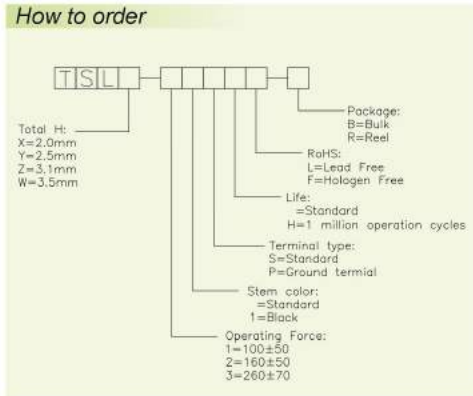


* Please follow drawing of Approved Sheet that catalog drawing only for reference.

* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSL Series

6.2×6.2 Ground Terminal Tact Switch

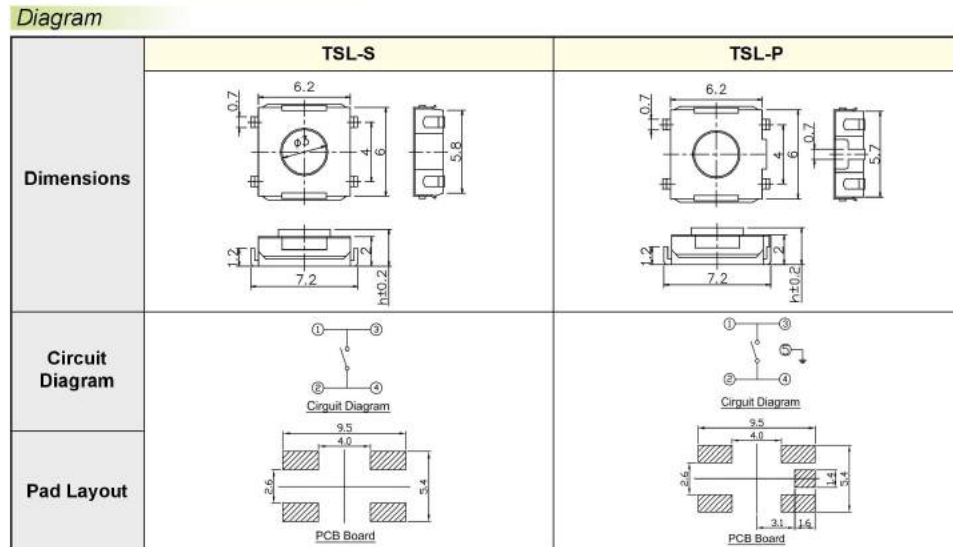


- Features**
- Reflow solderable.
 - Available with anti-ESD ground terminal.
 - Packaged with a 16mm wide embossed taping.

- Applications**
- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

Specification

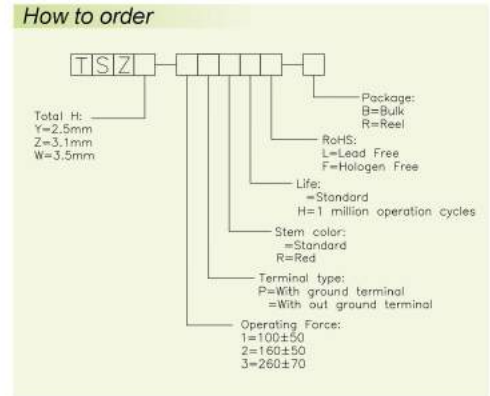
Items	Standard
Operating Temperature Range	-20°C to +70°C
Electrical performance	Rating: 50mA 12V DC
	Insulation Resistance: 100MΩ Min. 100V DC
	Dielectric Strength: 250V AC for 1 min (50Hz or 60Hz)
	Contact Resistance: 100 mΩ Max.
Durability	Operating Life: 100,000 Cycles ; 1,000,000 Cycles
Mechanical performance	Operating Force: 1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel: 0.25 + 0.2 / -0.1 mm



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSZ Series

6.2×6.5 Ground Terminal Tact Switch

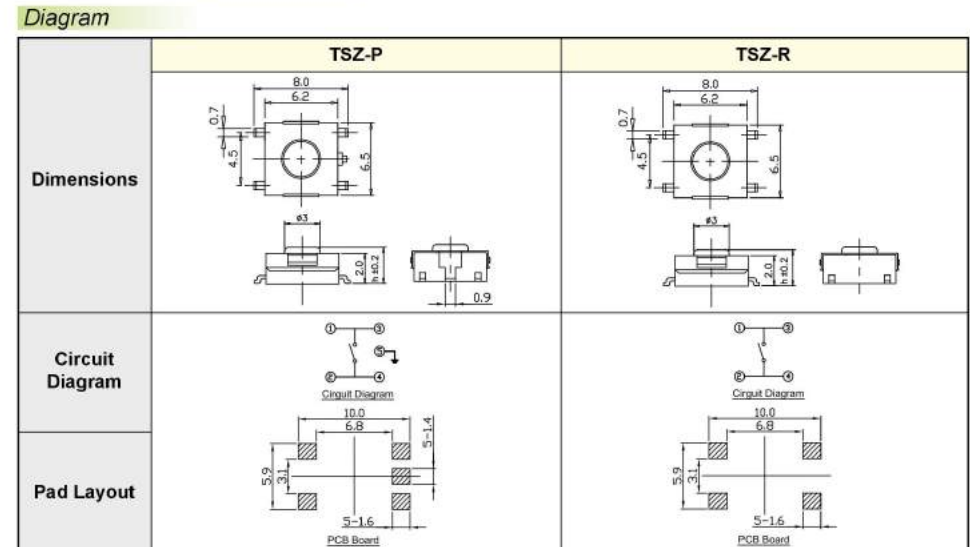


- Features**
- Reflow solderable.
 - Available with anti-ESD ground terminal.
 - Packaged with a 16mm wide embossed taping.

- Applications**
- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance: 100 mΩ Max.
Durability	Operating Life: 100,000 Cycles ; 1,000,000 Cycles
Mechanical performance	Operating Force: 1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel: 0.25 + 0.2 / -0.1 mm



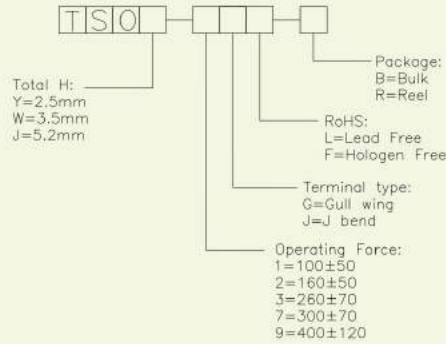
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSO Series

6.2×6.2 Rubber Stem Tact Switch



How to order



Features

- Stem is made of rubber, achieves excellent oprationality with pre-travel and over-travel.
- Rrflow solderable
- Package with a 24mm wide embossed taping.

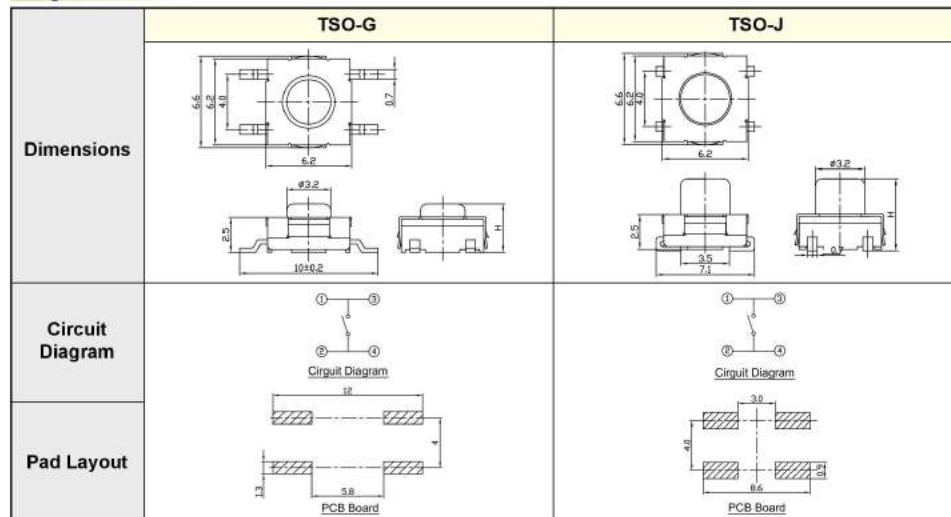
Applications

- Electric home appliances.
- Car navigation systems, car audio systems.
- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100gf: 1,000,000 Cycles ; 160gf: 500,000 Cycles ; Other:300,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf ; 7: 300±70gf ; 9: 400±120gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



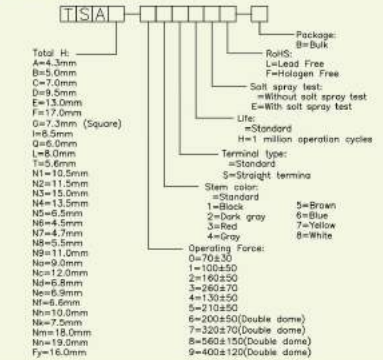
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSA Series

6.0×6.0 Through Hole Type Tact Switch



How to order



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Standard knobs are available.

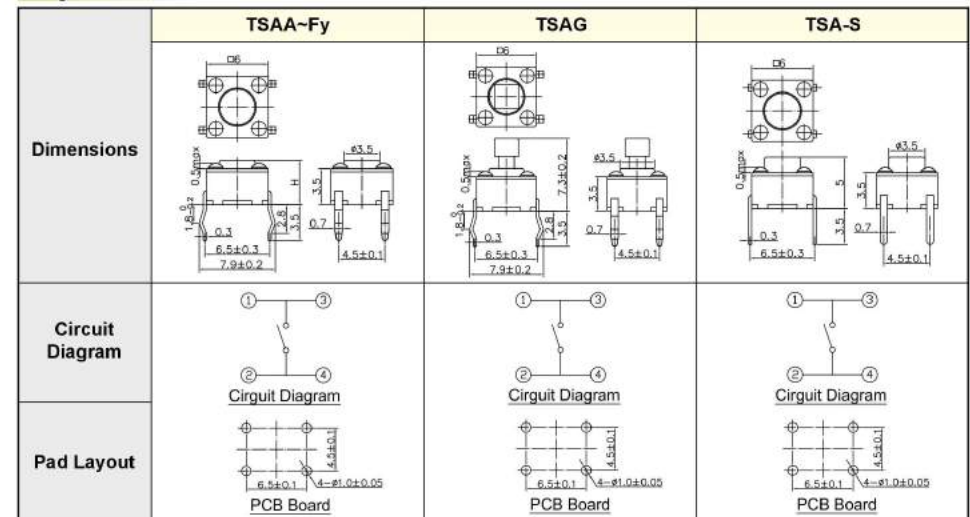
Applications

- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles ; 1,000,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 300±100gf ; 3: 260±70gf---
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSP Series

6.0×6.0 Through Hole Type Tact Switch



TS6C Series

6.0×6.0 Long Travel Tact Switch



How to order

TSP□□□□□□□□

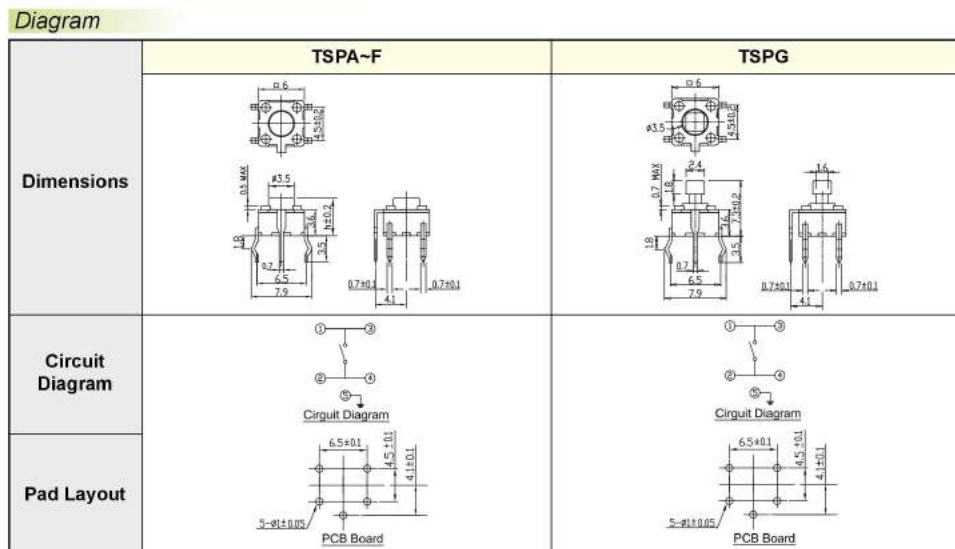
- Total H:
 - A=4.3mm
 - B=5.0mm
 - C=7.0mm
 - D=9.5mm
 - E=13.0mm
 - F=17.0mm
 - G=7.3mm (Square)
- Package:
 - B=Bulk
 - R=Reel
- RoHS:
 - L=Lead Free
 - F=Halogen Free
- Life:
 - =Standard
 - H=1 million operation cycles
- Stem color:
 - =Standard
 - 1=Black
 - 2=Dark gray
 - 3=Red
 - 4=Gray
 - 5=Brown
- Operating Force:
 - 1=100±50
 - 2=160±50
 - 3=260±70

- Features**
- Snap-in type, which can be directly mounted on PC board.
 - Some of output terminals can be also used as jumper leads, thus making circuit design easy.
 - Available with anti-ESD ground terminal.
 - Standard knobs are available.

- Applications**
- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles ; 1,000,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm



* Please follow drawing of Approved Sheet that catalog drawing only for reference.



How to order

TS6C□□□□□□□□

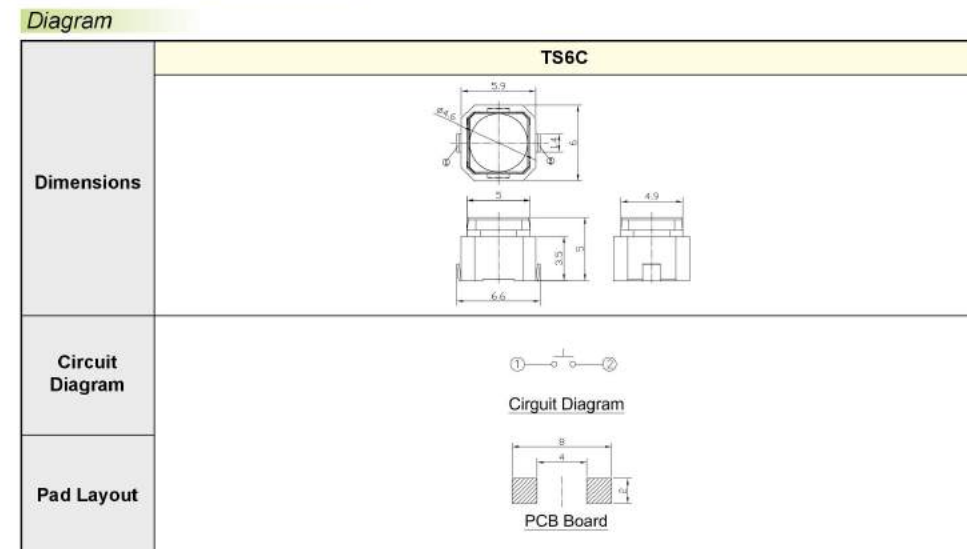
- Package:
 - B=Bulk
 - R=Reel
- RoHS:
 - L=Lead Free
 - F=Halogen Free
- Terminal type:
 - F=Flat
 - J=J bend
- Operating Force:
 - 2=160±50
 - 3=260±70

- Features**
- Steady and low contact resistance.
 - Improved operation by using a larger push plate.
 - Excellent solderability.

- Applications**
- Car electronics equipment.
 - Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	1.3 ± 0.2 mm



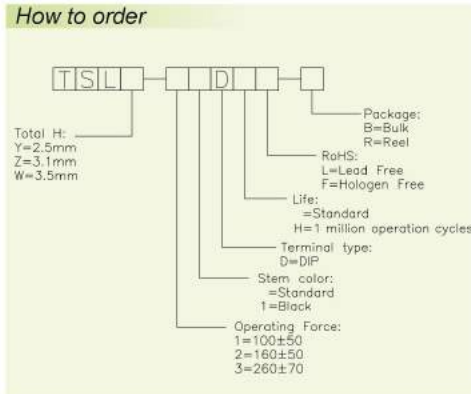
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

Tact Switch

Tact Switch

TSL-D Series

6.2×6.2 Low Height Through Hole Type Tact Switch



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Standard knobs are available.

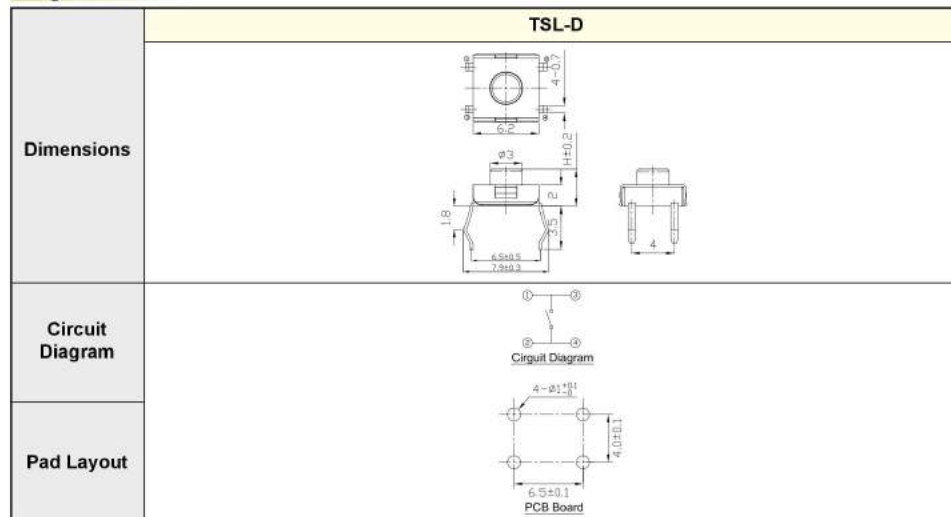
Applications

- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles ; 1,000,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

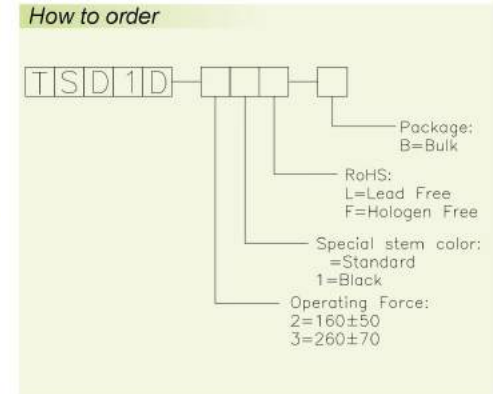
Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSD1D Series

6.0×8.4 Vertical Push Tact Switch



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Available with anti-ESD ground terminal.
- Standard knobs are available.

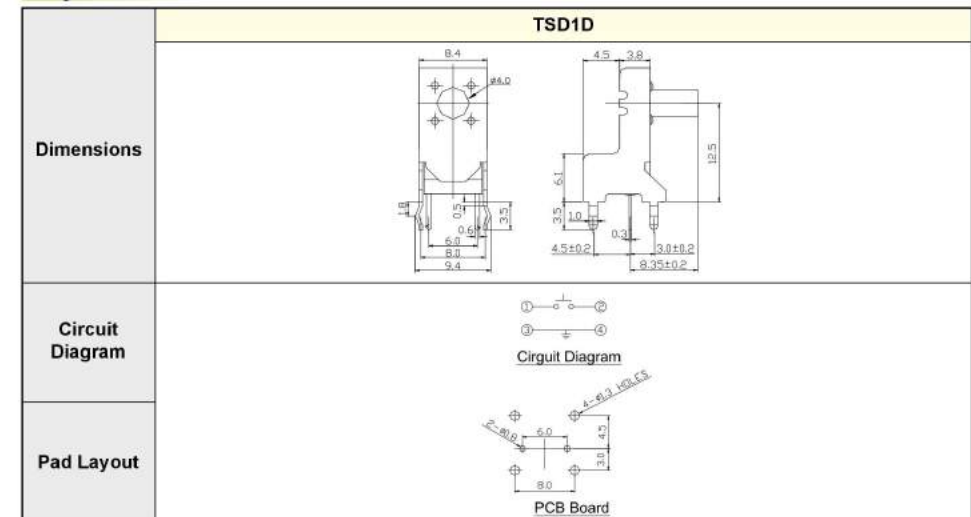
Applications

- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



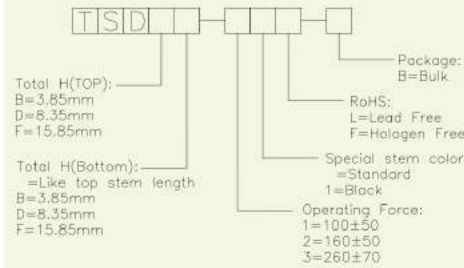
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSD Series

6.0 × 3.85~15.85 Two-Key Type Tact Switch



How to order



Features

- A vertical two-story TACT switch mechanism offers the best panel design flexibility.
- Vertical switch pitch: 12.5mm.

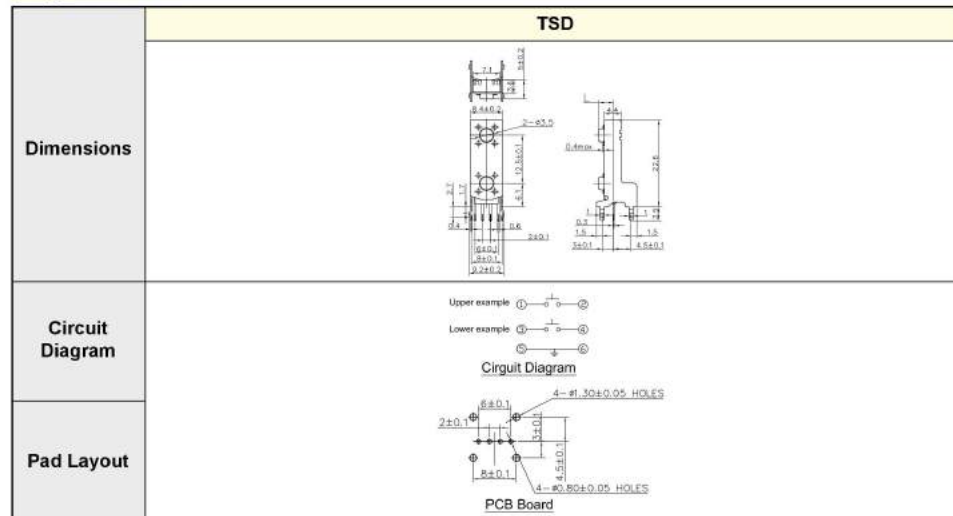
Applications

- Operating switches in all types of electronic equipment such as audio apparatus, office equipment, communications apparatus, measuring instruments, TV sets, VCRs, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram

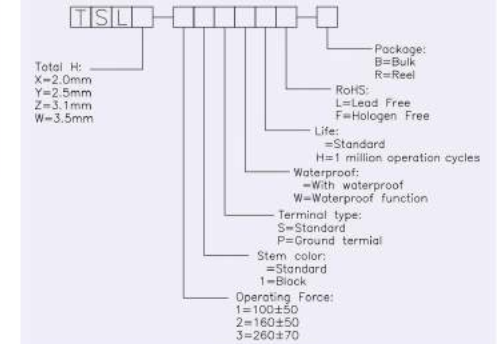


TSL-W Series

6.2 × 6.2 Washable Tact Switch



How to order



Features

- Reflow solderable.
- Available with anti-ESD ground terminal.
- Packaged with a 16mm wide embossed taping.

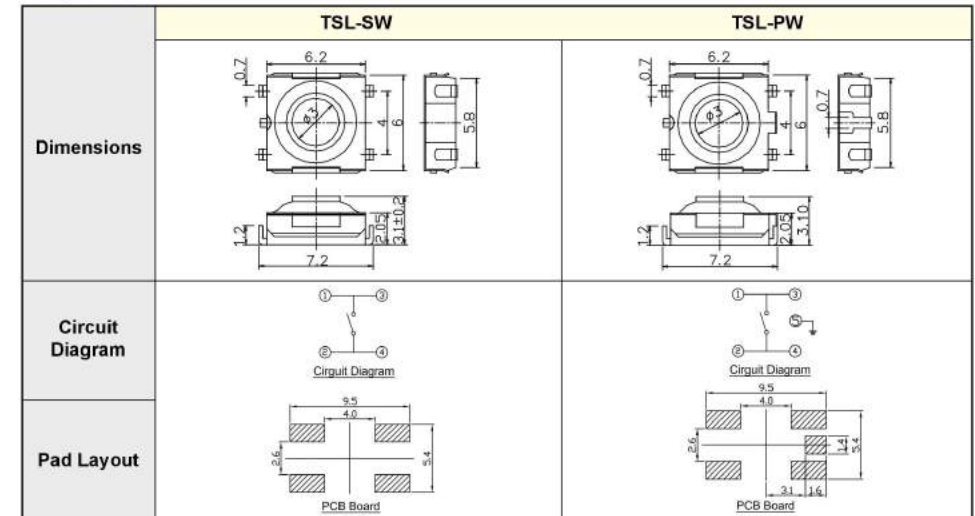
Applications

- Operating switches in all types of electronic equipment such as audio devices, office devices, communication devices, measuring instruments, TVs, video recorders, automotive sets, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles ; 1,000,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram

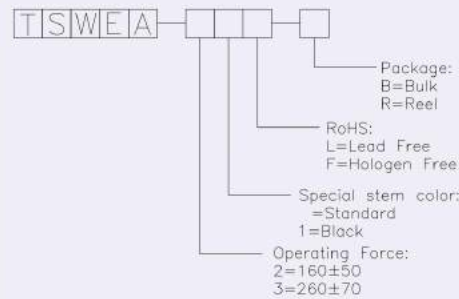


TSWEA Series

6.2×6.2 Washable Tact Switch



How to order



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Switch can be washable.

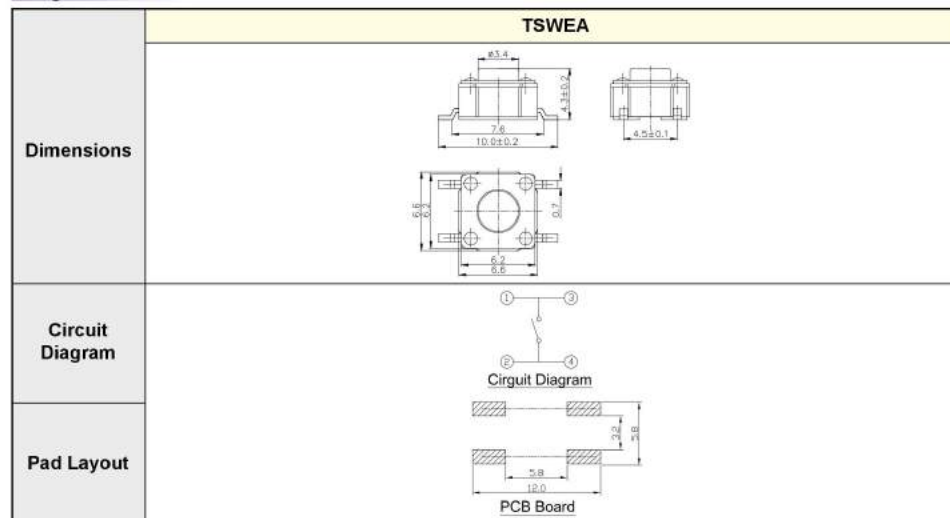
Applications

- For operating various electronic devices such as washing machines requiring water proof construction.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	300,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram

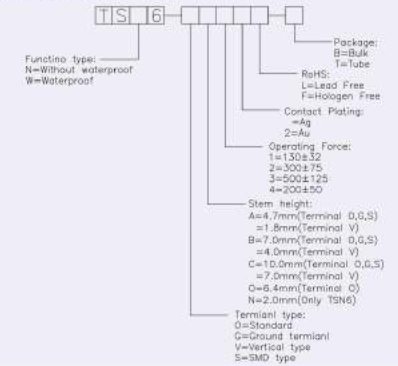


TSN6 / TSW Series

7.2×7.2 Washable Tact Switch



How to order



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Switch can be washable.

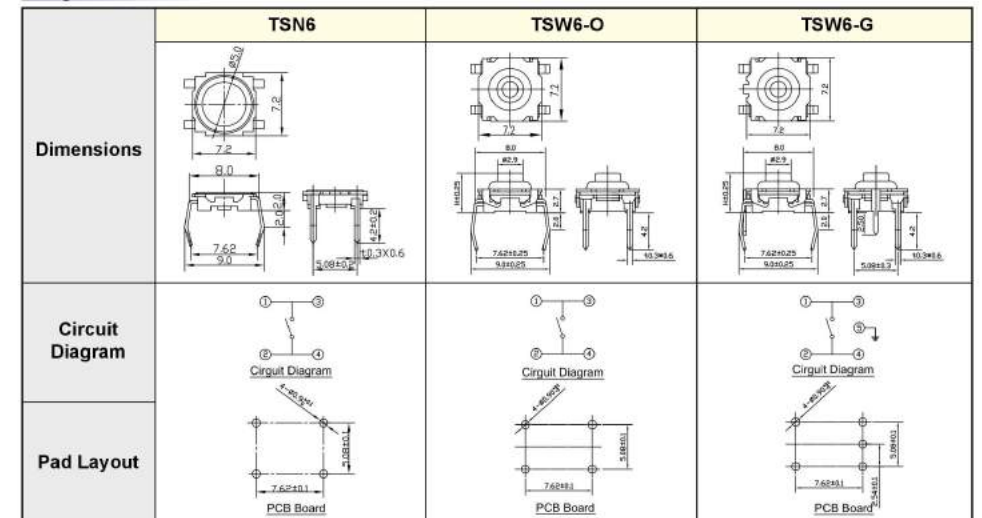
Applications

- For operating various electronic devices such as washing machines requiring water proof construction.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	1:130±32gf; 2:300±75gf; 3: 500±125gf; 4:200±50gf
	Travel	0.3 + 0.4 / -0 mm (TSW6_0 Series 0.7±0.2mm)

Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSW6 Series

7.2×1.8~7.0 Washable Tact Switch



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Switch can be washable.

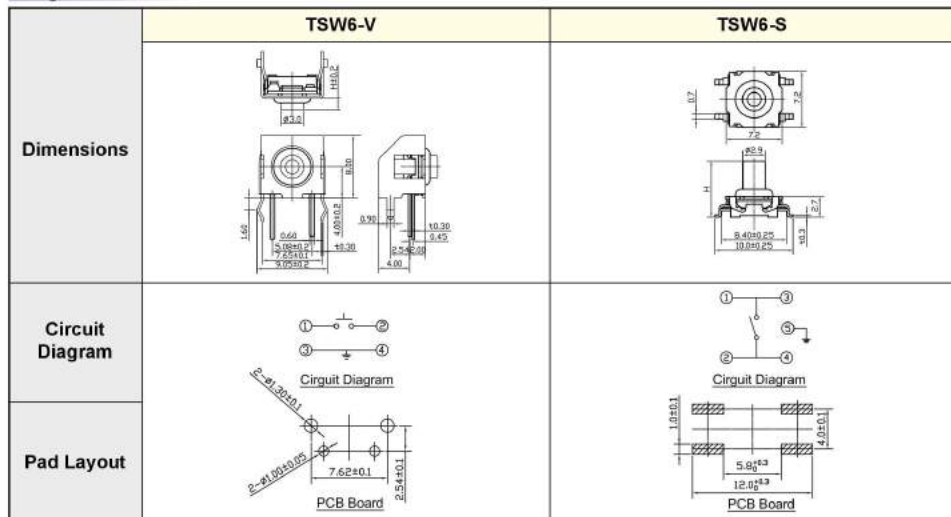
Applications

- For operating various electronic devices such as washing machines requiring water proof construction.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	1:130±32gf; 2:300±75gf; 3:500±125gf; 4:200±50gf
	Travel	0.3 + 0.4 / -0 mm (TSW6_O Series 0.7±0.2mm)

Diagram



* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSDBY Series

6.5×6.5 Washable Tact Switch



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Switch can be washable.

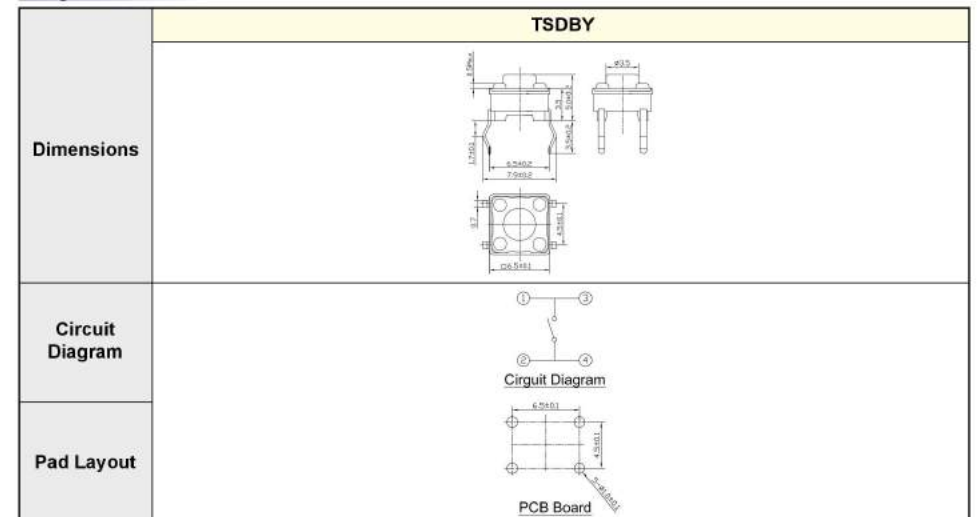
Applications

- For operating various electronic devices such as washing machines requiring water proof construction.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	2:160±50gf; 3:260±70gf
	Travel	0.3 + 0.2 / -0.1 mm

Diagram



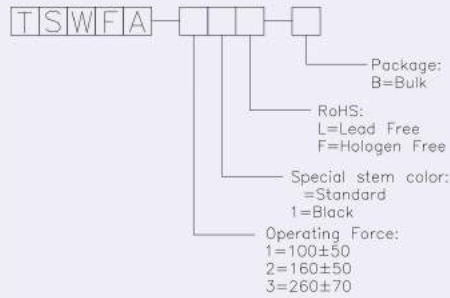
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSWFA Series

6.2×6.2 Washable Tact Switch



How to order



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Switch can be washable.

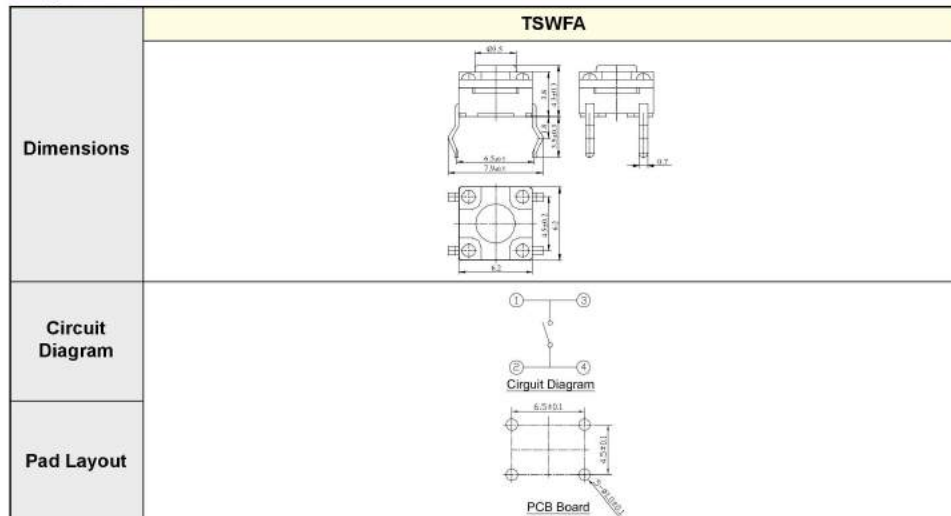
Applications

- For operating various electronic devices such as washing machines requiring water proof construction.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.3 + 0.2 / -0.1 mm

Diagram



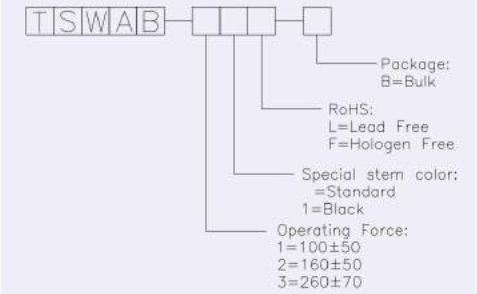
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSWAB Series

6.2×6.2 Washable Tact Switch



How to order



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Switch can be washable.

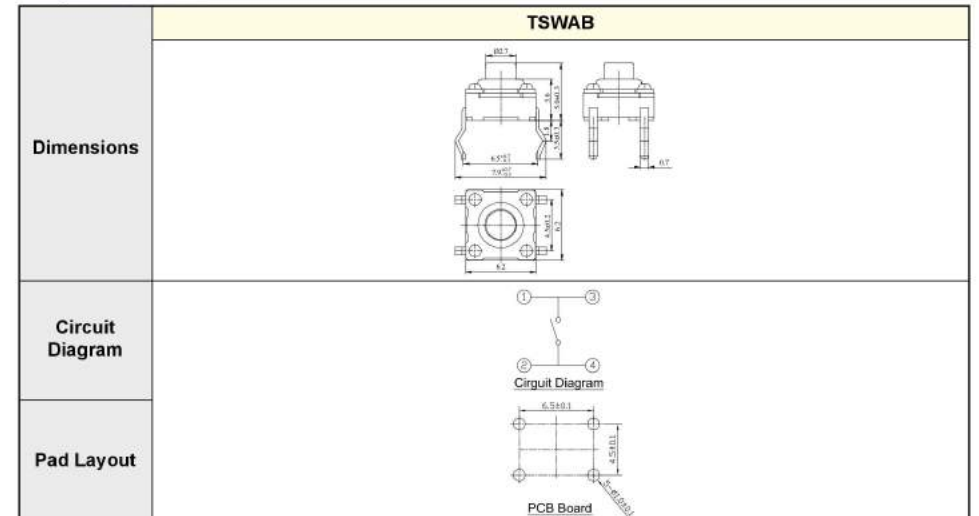
Applications

- For operating various electronic devices such as washing machines requiring water proof construction.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.3 + 0.2 / -0.1 mm

Diagram



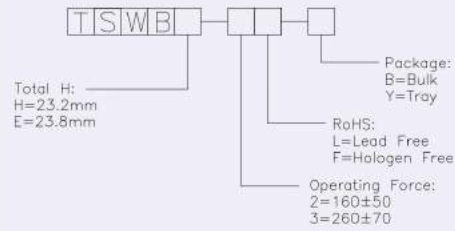
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSWB Series

10.0×10.0 Washable Tact Switch



How to order



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Switch can be washable.

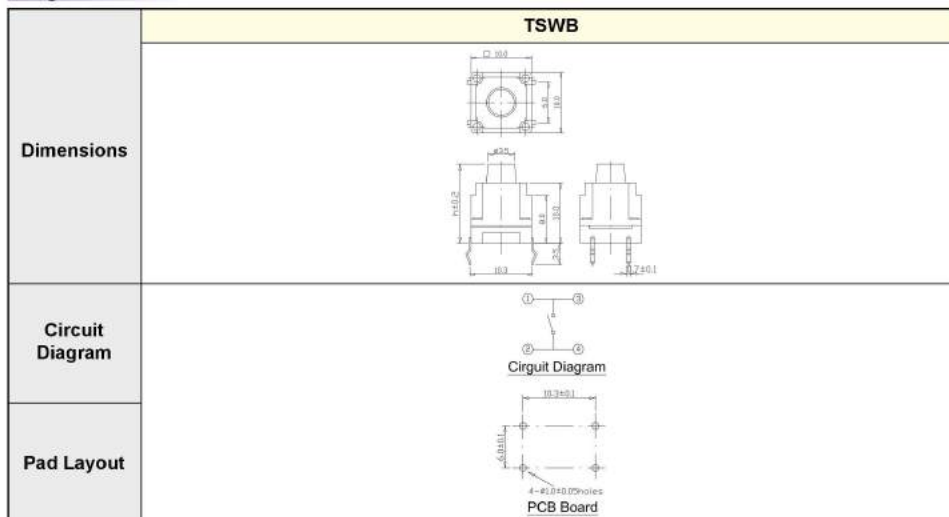
Applications

- For operating various electronic devices such as washing machines requiring water proof construction.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.4±0.2 mm

Diagram

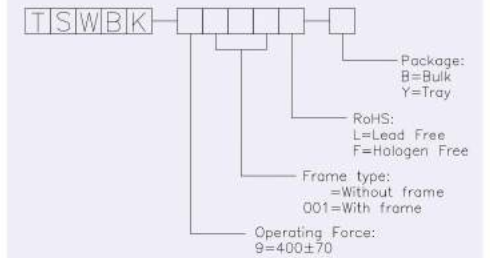


TSWBK Series

10.0×10.0 Washable Tact Switch



How to order



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Switch can be washable.

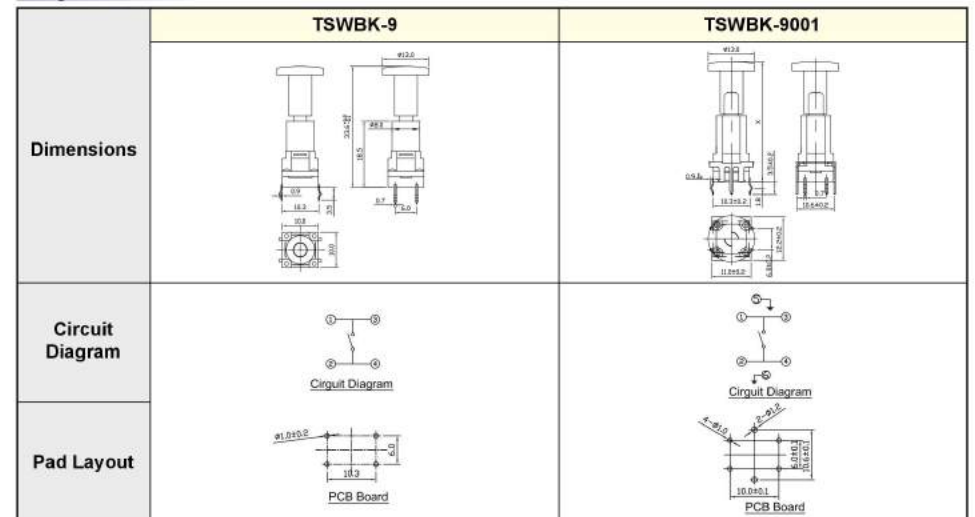
Applications

- For operating various electronic devices such as washing machines requiring water proof construction.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	9: 400±150gf
	Travel	0.4±0.2 mm

Diagram

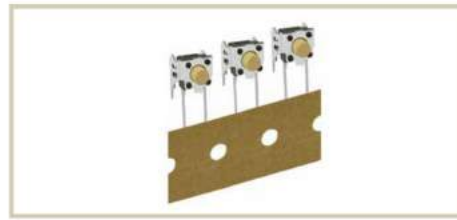


* Please follow drawing of Approved Sheet that catalog drawing only for reference.

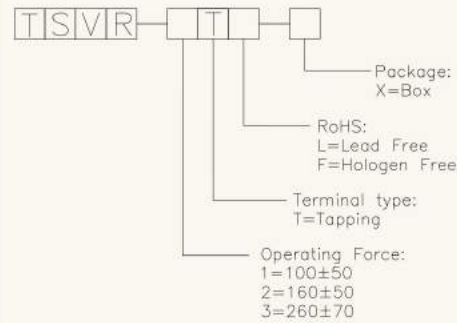
* Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSVR Series

6.0×4.8 Radial Taping Type Tact Switch



How to order



Features

- Supplied with radial taping.
- Allows automatic insertion onto PC board with the radial auto insertion machine.

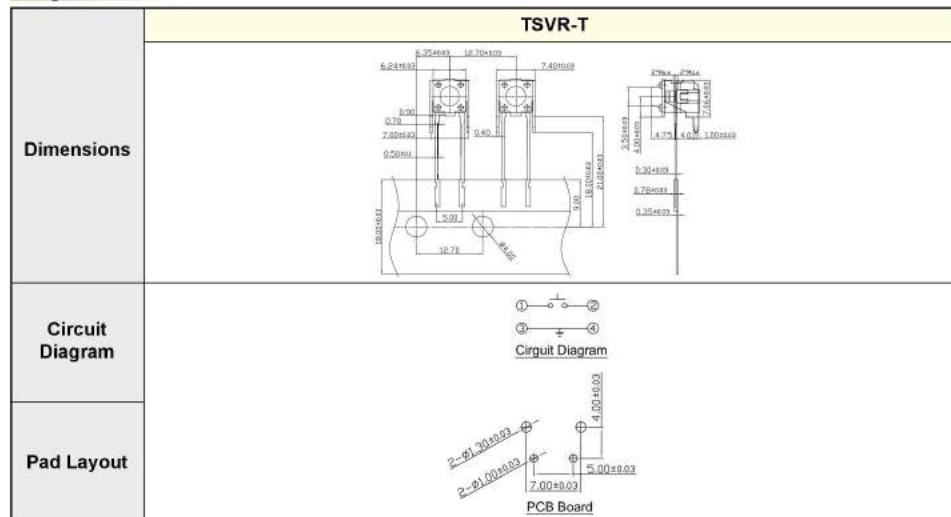
Applications

- Operating switches in all types of electronic equipment such as audio apparatus, office equipment, communication apparatus, measuring instruments, TV sets, VCRs, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

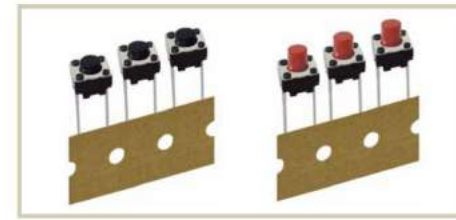
Diagram



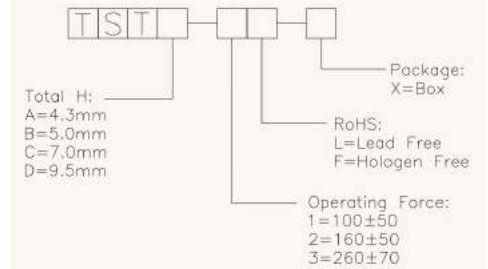
※ Please follow drawing of Approved Sheet that catalog drawing only for reference.

TST Series

6.0×6.0 Radial Taping Type Tact Switch



How to order



Features

- Supplied with radial taping.
- Allows automatic insertion onto PC board with the radial auto insertion machine.

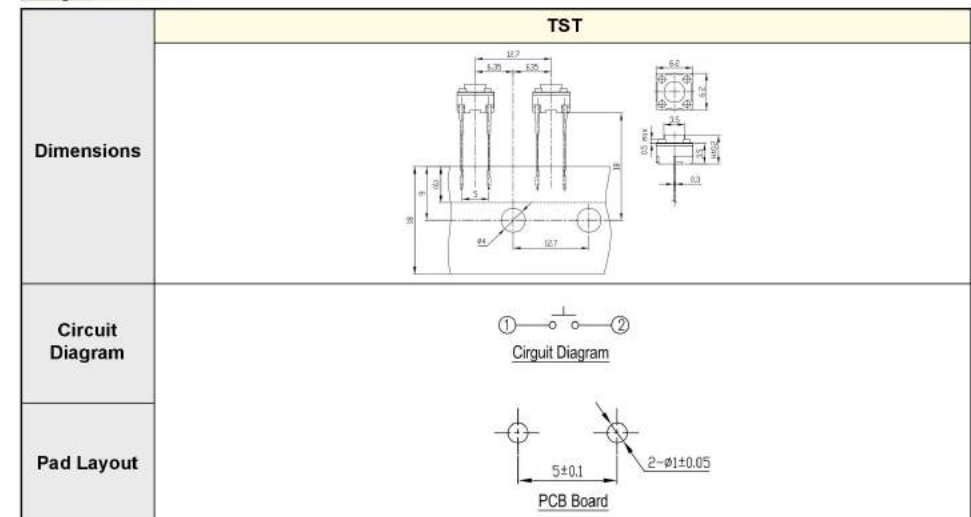
Applications

- Operating switches in all types of electronic equipment such as audio apparatus, office equipment, communication apparatus, measuring instruments, TV sets, VCRs, etc.

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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	100,000 Cycles
Mechanical performance	Operating Force	1: 100±50gf ; 2: 160±50gf ; 3: 260±70gf
	Travel	0.25 + 0.2 / -0.1 mm

Diagram



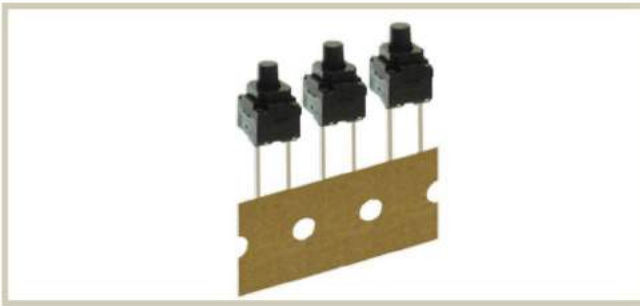
※ Please follow drawing of Approved Sheet that catalog drawing only for reference.

TSWD Series

8.0×8.0 Washable Tact Switch



Tact Switch



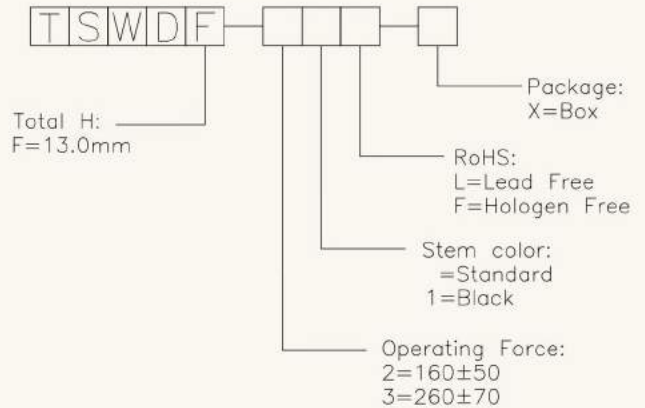
Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Switch can be washable.

Applications

- For operating various electronic devices such as washing machines requiring water proof construction.

How to order



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 (50Hz or 60Hz)
	Contact Resistance	100 mΩ Max.
Durability	Operating Life	50,000 Cycles ; 100,000 Cycles
Mechanical performance	Operating Force	2: 160±50gf ; 3: 260±70gf
	Travel	0.3 + 0.2 / -0.1 mm

Diagram

TSWD	
Dimensions	
Circuit Diagram	<p>Circuit Diagram</p>
Pad Layout	<p>PCB Board</p>

※ Please follow drawing of Approved Sheet that catalog drawing only for reference.