

E SERIES TACT SWITCH

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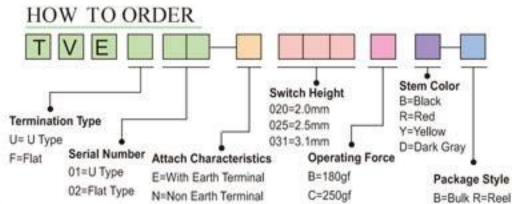






6.2x6.2 Flat & U-Type Terminals Type Tact Switch





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 Operating temperature range		Standard -30 ℃ to +85 ℃	
Electrical	Insulation resistance	100MWmin. 100V DC	
performance	Dielectric strength	250V AC for 1 min.	
	Contact resistance	100mWmax.	
Durability	Lifetime	B:500,000 Cycles C:300,000 Cycles	
Mechanical performance	Operating force	B:180gf C:250gf	
	Travel	0.25 ± 0.1mm	

No.	Dimensions	Circuit Diagram Pad Layout
1	TVEU01 TVEU01	3 8.8 3.3 3.3 3.3 3.3
2	TVEF02 BA805 6.2 2.0 A6	3 9.5 9.5 4

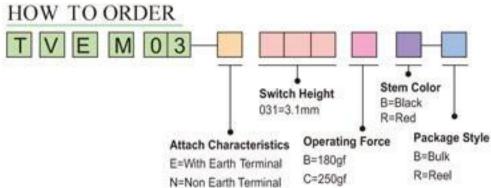






6.2x6.2 Non-rotating Stem Type Tact Switch





Features

- Reflow solderable.
- Available with anti-ESD ground terminal.
- Packaged with a 16mm wide embossed taping.
- For high-speed SMT processing

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 tem	perature range	-30 ℃ to +85 ℃	
	Rating	50mA. 12V DC	
Electrical	Insulation resistance	100MWmin. 100V DC	
performance	Dielectric strength	250V AC for 1 min.	
	Contact resistance	100mWmax.	
Durability	Lifetime	B:500,000 Cycles C:300,000 Cycles	
Mechanical	Operating force	B:180gf C:250gf	
performance	Travel	0.25 ± 0.1mm	

No.	Dimensions	Circuit Diagram Pad Layout
1	• TVEM03	① ② ⑥ ③ ③ ③ ③ ③ ③ ③ ③ ⑤ ⑤ ⑤ ⑤ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥



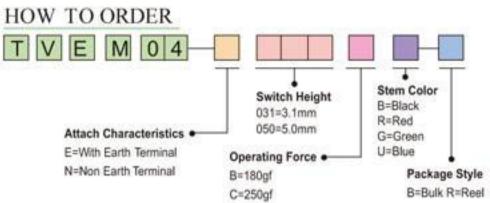






6.2x6.2 Dust-Proof Type Tact Switch





Features

- Reflow solderable.
- 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 tem	Operating temperature range -30 ℃ to +85 ℃		
	Rating	50mA. 12V DC	
Electrical	Insulation resistance	100MWmin. 100V DC	
performance	Dielectric strength	250V AC for 1 min.	
	Contact resistance	100mWmax.	
Durability	Lifetime	B:500,000 Cycles C:300,000 Cycles	
Mechanical performance	Operating force	B:180gf C:250gf	
	Travel	0.25 ± 0.1mm	

No.	Dimensions	
TVEM04	6 2+0 1 6 2+0 1 6 2+0 1	Pad Layout H 3.1 5.0







6.2x6.2 SMT Terminals Type Tact Switch



HOW TO ORDER Stem Color Attach Characteristics B=Black E=With Earth Terminal R=Red N=Non Earth Terminal Switch Height Operating Force 025=2.5mm A=90gf B=180gf Package Style 031=3.1mm C=250gf D=70gf B=Bulk 034=3.4mm J=160gf R=Reel

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 tem	perature range	-30℃ to +85℃	
	Rating	50mA. 12V DC	
Electrical	Insulation resistance	100MWmin. 100V DC	
performance	Dielectric strength	250V AC for 1 min.	
	Contact resistance	100mWmax.	
Durability	Lifetime	A:D:J:B:500,000 Cycles C:300,000 Cycles	
Mechanical performance	Operating force	A:90gf B:180gf C:250gf D:70gf J:120gf	
	Travel	0.25 ± 0.1mm	

No.	Dimensions	Circuit Diagram Pad Layout	
1	TVEM05-N 3.4 3.1 2.5	① ② ② ③ ③ ③ ③ ⑤ ⑤ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥	
2	TVEM05-E B G G G G G G G G G G G G	(1) (2) (5) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	



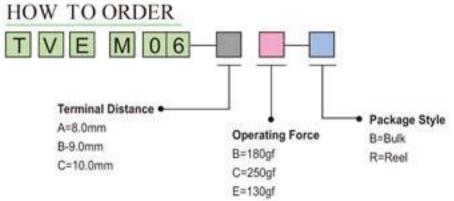






6.2x6.2 SMT Terminals Type Tact Switch





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 tem	perature range	-30℃ to +85℃	
	Rating	50mA, 12V DC	
Electrical	Insulation resistance	100MWmin, 100V DC	
performance	Dielectric strength	250V AC for 1 min.	
	Contact resistance	100mWmax.	
Durability	Lifetime	B:200,000 Cycles C:100,000 Cycles	
Mechanical performance	Operating force	B:180gf C:250gf	
	Travel	0.25 ± 0.1mm	

No.	Dimensions	Circuit Diagram Pad Layout
1	TVEM06	9.1 P

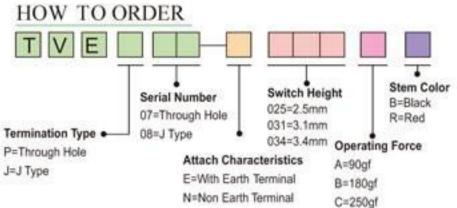






6.2x6.2 Through Hole Terminals Type Tact Switch





Features

- Reflow solderable.
- 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.

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 tem	perature range	-30℃ to +85℃	
	Rating	50mA. 12V DC	
Electrical	Insulation resistance	100MWmin. 100V DC	
performance	Dielectric strength	250V AC for 1 min.	
	Contact resistance	100mWmax.	
Durability	Lifetime	A:B:500,000 Cycles C:300,000 Cycles	
Mechanical performance	Operating force	A:90gf B:180gf C:250gf	
	Travel	0.25 ± 0.1mm	

No.	Dimensio	ons	Circuit Diagram Pad Layout
1	● TVEP07	6.5±0.5 7.9	3 65+0.1 4x1±0.05
2	© TVEJ08	H 3.4 3.1 2.5	① ② ② ② ③ ③ ⑤ ⑤ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥ ⑥







6.2x6.2 Normal Closed Type Tact Switch



HOW TO ORDER T V E F 0 9 Stem Color B=Black R=Red Operating Force B=180gf C=250gf Package Style B=Bulk R=Reel

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 Operating temperature range		Standard -30°C to +85°C	
Electrical	Insulation resistance	100MWmin, 100V DC	
performance	Dielectric strength	250V AC for 1 min.	
	Contact resistance	100mWmax.	
Durability	Lifetime	B:200,000 Cycles C:100,000 Cycles	
Mechanical performance	Operating force	B:180gf C:250gf	
	Travel	0.30 ± 0.1mm	

No.	Dimensions	Circuit Diagram Pad Layout
1	• TVEF09	9.3 4.7 2.2 3.3 4.7 2.2 3.3 4.7 2.2 3.3 4.7 2.2 3.3 4.7 2.2 3.3 4.7 2.2 3.3 4.7 3.3 4.7 3.3 4.7 3.3 4.7 3.3 4.7 3.3 4.7 3.3 4.7 4.7 4.7 4.7 4.7 4.7 4.7 4.7

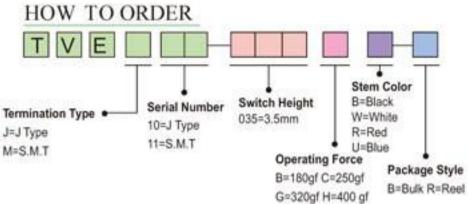






6.2x6.2 With Middle-travel (SMT)Type Tact Switch





Features

- Rubber Stem achieves excellent operationality with pre-travel and over-travel.
- Reflow solderable.
- Packaged with a 16mm 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 tem	perature range	-30℃ to +85℃	
	Rating	50mA. 12V DC	
Electrical	Insulation resistance	100MW min. 100V DC	
performance	Dielectric strength	250V AC for 1 min.	
	Contact resistance	100mW max.	
Durability	Lifetime	B:C:200,000 Cycles G:H:100,000 Cycles	
Mechanical performance	Operating force	B:180gf C:250gf G:320gf H:400gf	
	Travel	0.35 ± 0.1mm	

No.	Dimensions	Circuit Diagram Pad Layout
1	© TVEJ10 6.7±0.1 42.9 10.99	⊕ †
2	• TVEM11	3 8.5









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



HOW TO ORDER Stem Color Attach Characteristics • B=Black E=With Earth Terminal Switch Height . R=Red 023=2.3mm N=Non Earth Terminal G=Green Operating Force . 031=3.1mm U=Blue 035=3.5mm B=180gf N=Brown 038=3.8mm C=250gf Package Style 045=4.5mm B=Bulk R=Reel 052=5.2mm

Features

- Reflow solderable.
- Available with anti-ESD ground terminal.
- Packaged with a 16mm wide embossed taping.
- Water-proof type is available to have advantage in dusty environment.

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 Operating temperature range		Standard	
Electrical	Insulation resistance	100MWmin. 100V DC	
performance	Dielectric strength	250V AC for 1 min.	
	Contact resistance	100mWmax.	
Durability	Lifetime	B:200,000 Cycles C:100,000 Cycles	
Mechanical	Operating force	B:180gf C:250gf	
performance	Travel	0.25 ± 0.1mm	

No.	Dimensions	Circuit Diagram Pad Layout
1	■ TVEJ12-□ 031	3 8.6
2	● TVEJ12- □ 052	① ② ② ② ③ ③ ③ ③ ③ ③ ③ ③ ③ ③ ③ ⑥ ◎ ◎ ◎ ◎ ◎ ◎ ◎ ◎
3	• TVEJ12-□ 023	3 4 3

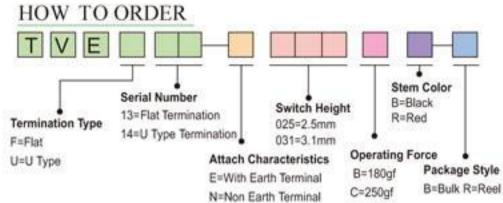






6.2x6.2 SMT Terminals Type Tact Switch





Features

- SMT type and reflow-soldering for surface mounting
- Wide product variety
- Available with ground termial
- Dust protection type is available to have advantage in dusty environment

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 Operating temperature range		Standard	
Electrical	Insulation resistance	100MWmin. 100V DC	
performance	Dielectric strength	250V AC for 1 min.	
	Contact resistance	100mWmax.	
Durability	Lifetime	B:500,000 Cycles C:300,000 Cycles	
Mechanical	Operating force	B:180gf C:250gf	
performance	Travel	0.25 ± 0.1mm	

No.		Dimensions		Circuit Diagram Pad Layout
1	• TVEF13	93.0 93.0	2.5 3.1	
	• TVEU14		H 2.5 3.1	3 50 4
2		PCS MOUNTING FACE		3 50 4



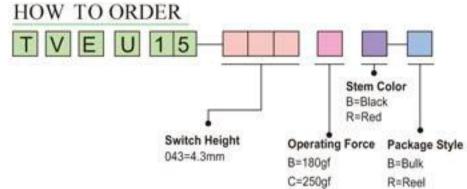






6.2x6.2 SMT Terminals Type Tact Switch





Features

- SMT type and reflow-soldering for surface mounting
- Dust protection type is available to have advantage in dusty environment

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 Operating temperature range		Standard -30°C to +85°C	
Electrical	Insulation resistance	100MWmin. 100V DC	
performance	Dielectric strength	250V AC for 1 min.	
	Contact resistance	100mWmax.	
Durability	Lifetime	B:500,000 Cycles C:300,000 Cycles	
Mechanical performance	Operating force	B:180gf C:250gf	
	Travel	0.25 ± 0.1mm	

No.	Dimensions	Circuit Diagram Pad Layout
• TVEL	PC.B MOUNTING FACE	①—○ ○—② 1 40 2 2 1 40 2 2 1 1 40 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1