

5N Type Light Touch Switches

Japan
Malaysia
China

Type: **EVQPA/EVQPB/EVQPF**
EVQ2/EVQPC

Broad product range meets a variety of needs

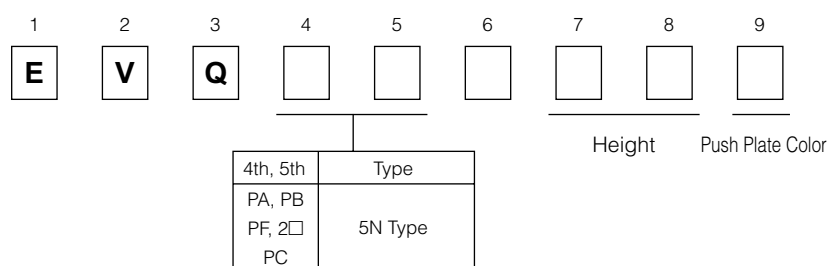
■ Features

- 6.0 mm×6.0 mm square, body thickness 3.2 mm
- Travel 0.25 mm (clear click feeling)
- Wide selection with or without ground terminal, top-push or side-operation type with snap-in terminals available
- Wave soldering applicable

■ Recommended Applications

- Operation button switches for audio/visual, OA, communication equipment, measurement instruments

■ Explanation of Part Numbers

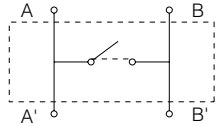
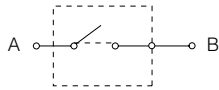


■ Product Chart

○=In production

Operating Force	Positioning Pin	Ground Terminal	Top-push Type				Side-operation Type			
			4.3 mm	5.0 mm	7.0 mm	9.5 mm	3.15 mm	3.85 mm	5.85 mm	8.35 mm
1.0 N	Without positioning pin	With ground terminal	○	○	○	○	○	○	○	○
		Without ground terminal	○	○	○	○	—	—	—	—
1.3 N	Without positioning pin	With ground terminal	○	○	○	○	○	○	○	○
		Without ground terminal	○	○	○	○	—	—	—	—
1.6 N	Without positioning pin	With ground terminal	○	○	○	○	○	○	○	○
		Without ground terminal	○	○	○	○	—	—	—	—
2.6 N	Without positioning pin	With ground terminal	○	○	○	○	○	○	○	○
		Without ground terminal	○	○	○	○	—	—	—	—

Major Specifications

Type			Snap action/Push-on type SPST	
Electrical	Circuit Diagram		Top-push 	Side-push 
	Rating		20 mA 15 Vdc	
	Contact Resistance		50 mΩ max.	
	Insulation Resistance		50 mΩ min. (at 100 Vdc)	
	Dielectric Withstanding Voltage		250 Vac for 1 minute	
	Bouncing		3 ms max. (ON) 8 ms max. (OFF)	
Mechanical	Operating Force		1.0 N±0.4 N 1.3 N±0.4 N 1.6 N±0.5 N	2.6 N±0.6 N
	Travel		0.25 mm±0.10 mm	
Endurance	Operating Life		100000 cycles min.*	50000 cycles min.
	Operating Temperature		-20 °C to +70 °C (45 % to 85 % RH)	
	Storage Temperature		-40 °C to +85 °C (Bulk) -20 °C to +40 °C (Taping)	
Minimum Quantity/ Packing Unit	Top-push	Balk	500 pcs. (Vinyl Bag)	
		Taping	1000 pcs. (Radial Taping)	
	Side-operation	Balk	500 pcs. (Vinyl Bag)	
		Taping	700 pcs. (Radial Taping)	
Quantity/Carton	Top-push	Balk	10000 pcs.	
		Taping	10000 pcs.	
	Side-operation	Balk	10000 pcs.	
		Taping	7000 pcs.	

*1 million cycles also available, consult our salesmen.

■ Dimensions in mm (not to scale)

No. 1

Japan

Malaysia

China

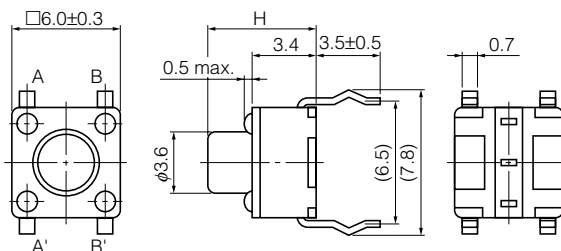
EVQPA

(Bulk)

Top-push

Without ground terminal





Technical drawing of the EVQPA light touch switch showing dimensions and recommended PWB piercing plan.

Dimensions:

- Top view: 6.0 ± 0.3 mm square frame, terminal spacing A-B and A'-B'.
- Side view: Height H, base width 3.4 mm, terminal width 3.5 ± 0.5 mm, mounting hole diameter $\phi 3.6$ mm, and overall width (6.5) / (7.8) mm.
- Front view: Terminal width 0.7 mm.

Recommended PWB piercing plan (Pitch tolerance: ± 0.1) View from mounting side:

- 4 holes arranged in a 2x2 grid.
- Pitch: 4.5 mm.
- Overall width: 6.5 mm.
- Hole diameter: $4\text{-}\phi 1.0^{+0.1}_0$ mm.

Part Numbers	Operating Force	H=Height	Push Plate Color	Operating Life
EVQPAC04M	1.0 N	4.3 mm	White	100000 cycles
EVQPAC05R	1.0 N	5.0 mm	Red	100000 cycles
EVQPAC07K	1.0 N	7.0 mm	Black	100000 cycles
EVQPAC09K	1.0 N	9.5 mm	Black	100000 cycles
EVQPAD04M	1.3 N	4.3 mm	White	100000 cycles
EVQPAD05R	1.3 N	5.0 mm	Red	100000 cycles
EVQPAD07K	1.3 N	7.0 mm	Black	100000 cycles
EVQPAD09K	1.3 N	9.5 mm	Black	100000 cycles
EVQPAE04M	1.6 N	4.3 mm	White	100000 cycles
EVQPAE05R	1.6 N	5.0 mm	Red	100000 cycles
EVQPAE07K	1.6 N	7.0 mm	Black	100000 cycles
EVQPAE09K	1.6 N	9.5 mm	Black	100000 cycles
EVQPAG04M	2.6 N	4.3 mm	White	50000 cycles
EVQPAG05R	2.6 N	5.0 mm	Red	50000 cycles
EVQPAG07K	2.6 N	7.0 mm	Black	50000 cycles
EVQPAG09K	2.6 N	9.5 mm	Black	50000 cycles

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.
Should a safety concern arise regarding this product, please be sure to contact us immediately.

■ Dimensions in mm (not to scale)

No. 2

Japan
China

EVQPB

(Bulk)

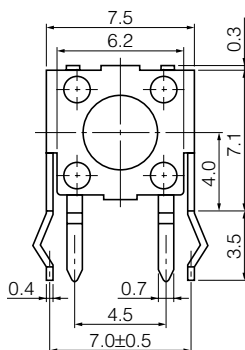
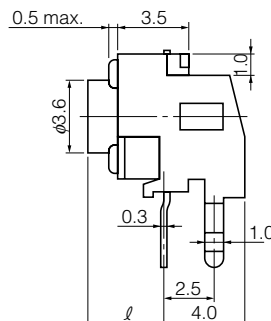
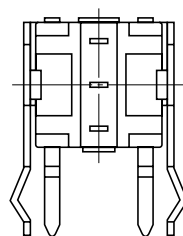
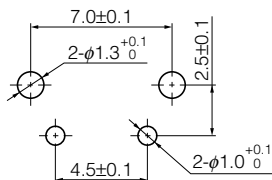
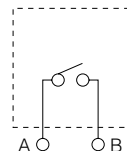
Top-push
With ground terminal

Recommended PWB piercing plan
(Pitch tolerance: ±0.1)
View from mounting side

Part Numbers	Operating Force	H=Height	Push Plate Color	Operating Life
EVQPBC04M	1.0 N	4.3 mm	White	100000 cycles
EVQPBC05R	1.0 N	5.0 mm	Red	100000 cycles
EVQPBC07K	1.0 N	7.0 mm	Black	100000 cycles
EVQPBC09K	1.0 N	9.5 mm	Black	100000 cycles
EVQPBD04M	1.3 N	4.3 mm	White	100000 cycles
EVQPBD05R	1.3 N	5.0 mm	Red	100000 cycles
EVQPBD07K	1.3 N	7.0 mm	Black	100000 cycles
EVQPBD09K	1.3 N	9.5 mm	Black	100000 cycles
EVQPBE04M	1.6 N	4.3 mm	White	100000 cycles
EVQPBE05R	1.6 N	5.0 mm	Red	100000 cycles
EVQPBE07K	1.6 N	7.0 mm	Black	100000 cycles
EVQPBE09K	1.6 N	9.5 mm	Black	100000 cycles
EVQPBG04M	2.6 N	4.3 mm	White	50000 cycles
EVQPBG05R	2.6 N	5.0 mm	Red	50000 cycles
EVQPBG07K	2.6 N	7.0 mm	Black	50000 cycles
EVQPBG09K	2.6 N	9.5 mm	Black	50000 cycles

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Should a safety concern arise regarding this product, please be sure to contact us immediately.

■ Dimensions in mm (not to scale)

No. 3 Japan EVQPF (Bulk) Side-operation Without ground terminal 	    Recommended PWB piercing plan (PWB thickness=1.6 mm) View from mounting side  Circuit diagram			
Part Numbers	Operating Force	ℓ =Push Plate Place	Push Plate Color	Operating Life
EVQPF003M	1.0 N	3.15 mm	White	100000 cycles
EVQPF004R	1.0 N	3.85 mm	Red	100000 cycles
EVQPF006K	1.0 N	5.85 mm	Black	100000 cycles
EVQPF008K	1.0 N	8.35 mm	Black	100000 cycles
EVQPF103M	1.3 N	3.15 mm	White	100000 cycles
EVQPF104R	1.3 N	3.85 mm	Red	100000 cycles
EVQPF106K	1.3 N	5.85 mm	Black	100000 cycles
EVQPF108K	1.3 N	8.35 mm	Black	100000 cycles
EVQPF203M	1.6 N	3.15 mm	White	100000 cycles
EVQPF204R	1.6 N	3.85 mm	Red	100000 cycles
EVQPF206K	1.6 N	5.85 mm	Black	100000 cycles
EVQPF208K	1.6 N	8.35 mm	Black	100000 cycles
EVQPF303M	2.6 N	3.15 mm	White	50000 cycles
EVQPF304R	2.6 N	3.85 mm	Red	50000 cycles
EVQPF306K	2.6 N	5.85 mm	Black	50000 cycles
EVQPF308K	2.6 N	8.35 mm	Black	50000 cycles

■ Dimensions in mm (not to scale)

No. 4

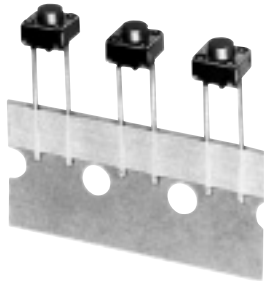
Japan
Malaysia
China

EVQ2

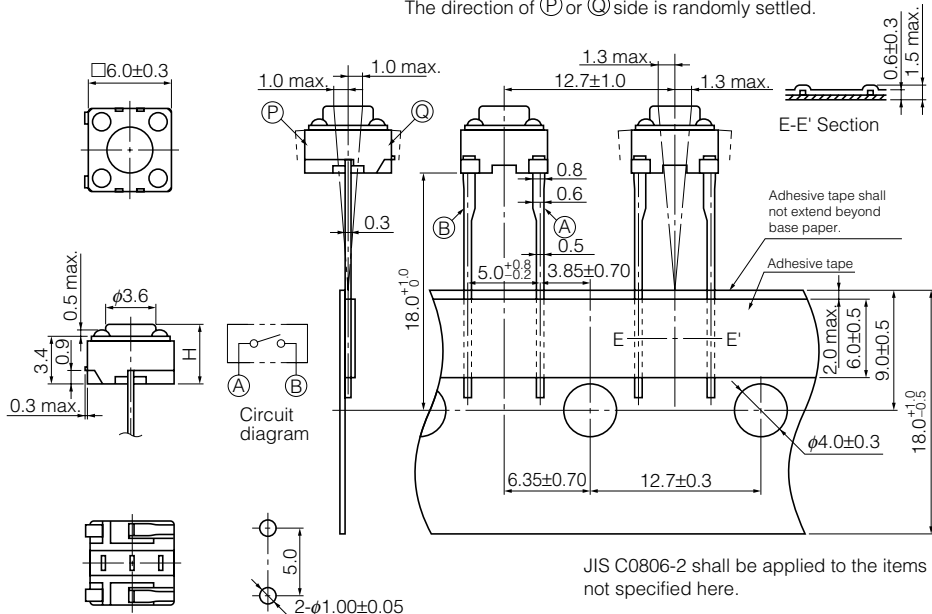
(Radial Taping)

Top-push
With ground terminal

2-terminal type
Without ground terminal



The direction of (P) or (Q) side is randomly settled.



Top view dimensions: 6.0 ± 0.3 , 12.7 ± 1.0 , 1.3 max. , 1.0 max. , 0.3 , 0.6 ± 0.3 , 1.5 max.

Side view dimensions: 0.3 max. , 3.4 , 0.9 , 0.5 max. , $\phi 3.6$, H , 0.3 max.

Cross-section E-E' dimensions: $18.0^{+1.0}_0$, $5.0^{+0.8}_{-0.2}$, 3.85 ± 0.70 , 0.8 , 0.6 , 0.5 , 6.35 ± 0.70 , 12.7 ± 0.3 , $18.0^{+1.0}_0$, 4.0 ± 0.3 , 2.0 max. , 6.0 ± 0.5 , 9.0 ± 0.5

Other dimensions: $2-\phi 1.00 \pm 0.05$, 5.0

Notes: Adhesive tape shall not extend beyond base paper. JIS C0806-2 shall be applied to the items not specified here.

Circuit diagram: A switch with terminals (A) and (B).

Recommended PWB piercing plan
(Pitch tolerance: ± 0.1)
View from mounting side

Part Numbers	Operating Force	H=Height	Push Plate Color	Operating Life
EVQ21304M	1.0 N	4.3 mm	White	100000 cycles
EVQ21305R	1.0 N	5.0 mm	Red	100000 cycles
EVQ21307K	1.0 N	7.0 mm	Black	100000 cycles
EVQ21309K	1.0 N	9.5 mm	Black	100000 cycles
EVQ21404M	1.3 N	4.3 mm	White	100000 cycles
EVQ21405R	1.3 N	5.0 mm	Red	100000 cycles
EVQ21407K	1.3 N	7.0 mm	Black	100000 cycles
EVQ21409K	1.3 N	9.5 mm	Black	100000 cycles
EVQ21504M	1.6 N	4.3 mm	White	100000 cycles
EVQ21505R	1.6 N	5.0 mm	Red	100000 cycles
EVQ21507K	1.6 N	7.0 mm	Black	100000 cycles
EVQ21509K	1.6 N	9.5 mm	Black	100000 cycles
EVQ22704M	2.6 N	4.3 mm	White	50000 cycles
EVQ22705R	2.6 N	5.0 mm	Red	50000 cycles
EVQ22707K	2.6 N	7.0 mm	Black	50000 cycles
EVQ22709K	2.6 N	9.5 mm	Black	50000 cycles

■ Dimensions in mm (not to scale)

No. 5

Japan
China

EVQPC

(Radial Taping)

Side-operation
Without ground terminal

Recommended PWB piercing plan
(Pitch tolerance: ± 0.1)
View from mounting side

Circuit diagram

Part Numbers	Operating Force	Push Plate Place	Push Plate Color	Operating Life	Insert Machine	H ₀ Dimension
EVQPC005K	1.0 N	4.75 mm	Black	100000 cycles	Panasert	20 mm
EVQPC105K	1.3 N	4.75 mm	Black	100000 cycles	Panasert	20 mm
EVQPC205K	1.6 N	4.75 mm	Black	100000 cycles	Panasert	20 mm
EVQPC305K	2.6 N	4.75 mm	Black	50000 cycles	Panasert	20 mm
EVQPC405K	1.0 N	4.75 mm	Black	100000 cycles	Avisert	21 mm
EVQPCP05K	1.3 N	4.75 mm	Black	100000 cycles	Avisert	21 mm
EVQPC605K	1.6 N	4.75 mm	Black	100000 cycles	Avisert	21 mm
EVQPC705K	2.6 N	4.75 mm	Black	50000 cycles	Avisert	21 mm