

5N Type Light Touch Switches

Japan
Malaysia
China

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

Broad product range meets a variety of needs

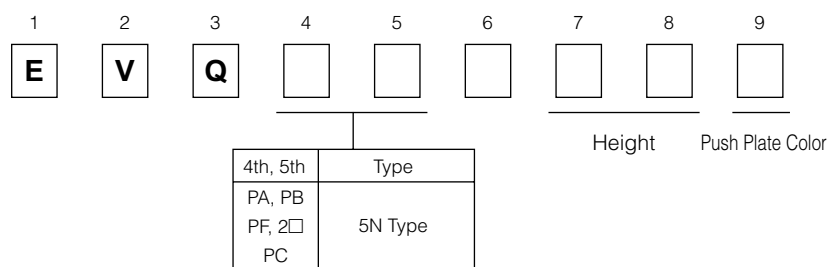
■ Features

- 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

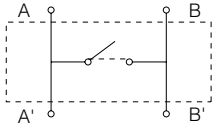


■ Product Chart

○=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

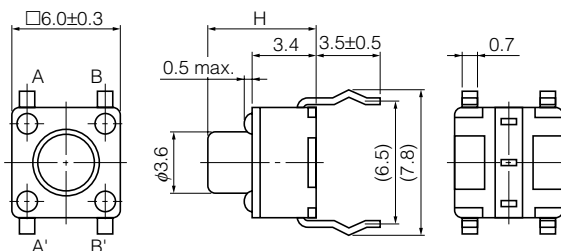
Japan
Malaysia
China

EVQPA

(Bulk)

Top-push
Without ground terminal





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

Top View Dimensions:

- Overall width: 6.0 ± 0.3
- Terminal spacing (A to B): 3.4
- Terminal spacing (A' to B'): 3.5 ± 0.5
- Terminal diameter: $\phi 3.6$
- Terminal height: 0.5 max.

Side View Dimensions:

- Height (H): 4.3 mm (for EVQPAC04M)
- Base width: 6.5 mm
- Terminal height: 7.8 mm

Front View Dimensions:

- Terminal width: 0.7

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

- 4 pins arranged in a square pattern.
- Pin pitch: 1.0 ± 0.1
- Pin diameter: $4 \times \phi 1.0 \pm 0.1$
- Pin spacing: 4.5
- Pin diameter: 6.5

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

■ Dimensions in mm (not to scale)

No. 2

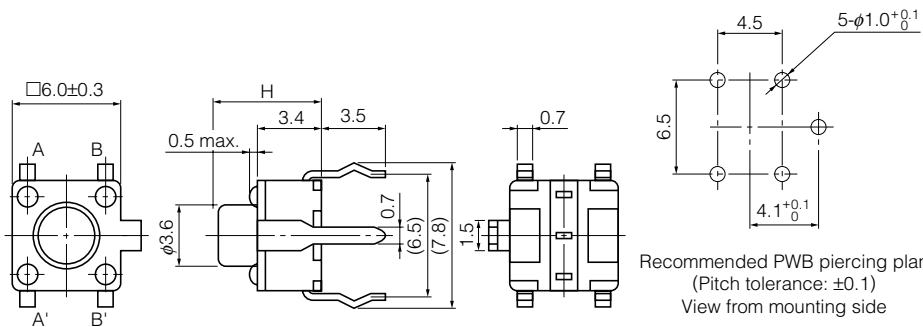
Japan
China

EVQPB

(Bulk)

Top-push
With ground terminal

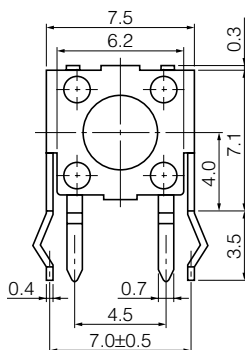
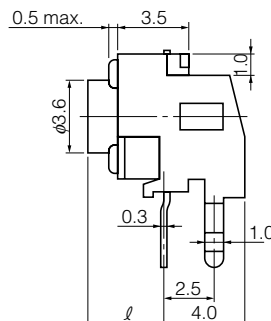
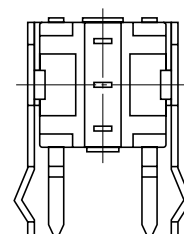
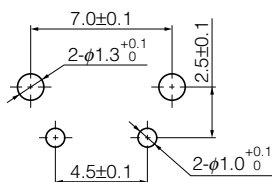
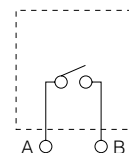




Recommended PWB piercing plan
(Pitch tolerance: ±0.1)
View from mounting side

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

■ 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.

Technical drawings of the EVQ2 switch showing dimensions in mm:

- Top View:** Square footprint with side length 6.0 ± 0.3 . Pin pitch is 12.7 ± 1.0 . Pin diameter is $\phi 0.6 \pm 0.3$. Pin length is 1.5 max.
- Side View:** Total height H . Mounting hole diameter $\phi 3.6$. Mounting hole offset 0.9 . Pin diameter $\phi 0.6 \pm 0.3$. Pin length 1.5 max. . Ground terminal diameter $\phi 0.3 \text{ max.}$
- Cross-section (E-E' Section):** Shows internal components. Dimensions include: pin diameter $\phi 0.6 \pm 0.3$, pin length 1.5 max. , mounting hole diameter $\phi 3.6$, mounting hole offset 0.9 , pin diameter $\phi 0.6 \pm 0.3$, pin length 1.5 max. , ground terminal diameter $\phi 0.3 \text{ max.}$, and total height H .
- Recommended PWB piercing plan:** Pitch tolerance: ± 0.1 . View from mounting side. Dimensions include: pin diameter $\phi 1.00 \pm 0.05$, pin length 5.0 , and pin diameter $\phi 0.6 \pm 0.3$.
- Other dimensions:** Pin diameter $\phi 0.6 \pm 0.3$, pin length 1.5 max. , mounting hole diameter $\phi 3.6$, mounting hole offset 0.9 , pin diameter $\phi 0.6 \pm 0.3$, pin length 1.5 max. , ground terminal diameter $\phi 0.3 \text{ max.}$, and total height H .

JIS C0806-2 shall be applied to the items not specified here.

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)

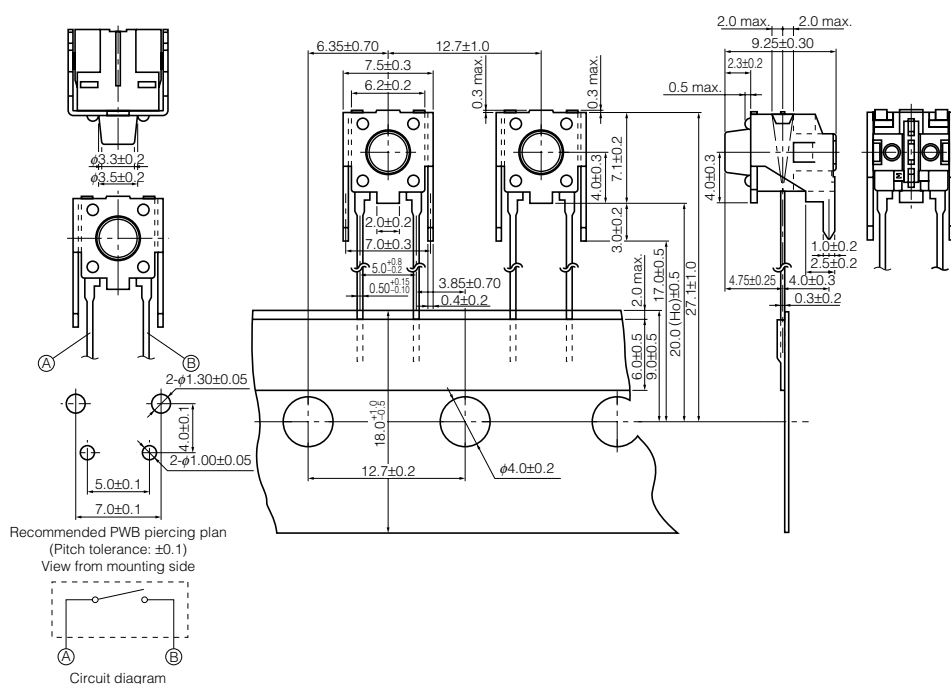
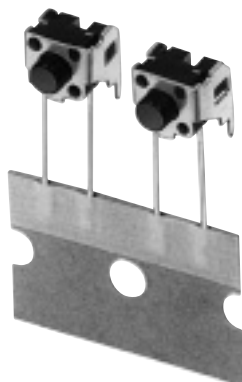
No. 5

Japan
China

EVQPC

(Radial Taping)

Side-operation
Without ground terminal



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