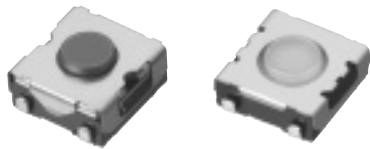


2 mm Thick SMD Light Touch Switches
for Reflow Soldering (With Push Plate)

Type: **EVQPH/EVQQW**

Japan



Surface-mount type with a push plate

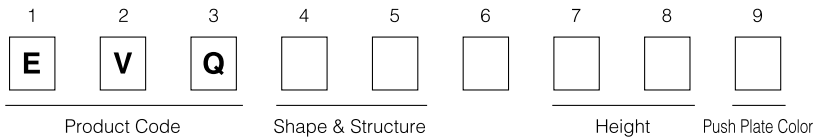
■ Features

- Easy operation with push plate
- Reflow soldering
- Wide product variety

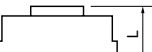
■ Recommended Applications

- Car electronics equipment

■ Explanation of Part Numbers



■ Product Chart

Type with Push plate	Soldering		Reflow soldering			
			Without sealing film		With sealing film	
	Packaging		Taping L=2.0, 2.5, 3.1 mm		Taping L=3.1 mm	
			Ground terminal	Without	With	Without
Profile 	Operating Force	1.3 N	EVQQWP	EVQQWM	EVQPHP	EVQPHL
		1.6 N	EVQQWS	EVQQWN	EVQPHV	EVQPHN
		2.6 N	EVQQWT	EVQQWK	EVQPHU	EVQPHK

■ Major Specifications

Type			Snap action / Push-on type SPST	
Electrical	Rating		20 mA 15 Vdc max.	
	Contact Resistance		50 mΩ max.	
	Insulation Resistance		50 MΩ min. (at 100Vdc)	
	Dielectric Withstanding Voltage		250 Vac for 1 minute	
	Bouncing		3 ms max. (ON) 8 ms max. (OFF)	
Mechanical	Operating Force		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	EVQPH	100000 cycles min.	50000 cycles min.
		EVQQW	1000000 cycles min.	100000 cycles min.
	Operating Temperature		-20 °C to +70 °C (45 % to 85 % RH)	
	Storage Temperature		-40 °C to +85 °C (Bulk) -20 °C to +60 °C (Taping)	
Minimum Quantity/Packing Unit			H=2.0 mm	4000 pcs. (Reel Pack)
			H=2.5 mm, 3.1 mm	2000 pcs. (Reel Pack)
Quantity/Carton			H=2.0 mm	20000 pcs.
			H=2.5 mm, 3.1 mm	10000 pcs.

Note: Non washable

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

No. 1

EVQPH

(Embossed Taping)

With push plate

Surface mount

For reflow soldering

With ground terminal

Without ground terminal

Notes:

1. Non-washable in solvents
2. Types with ground terminal available

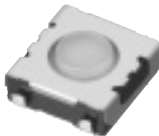
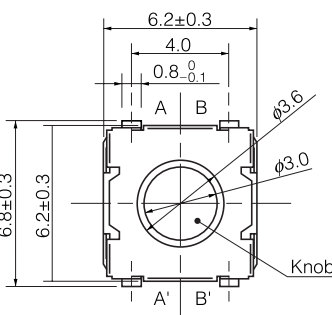
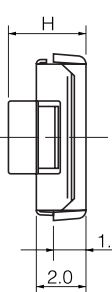
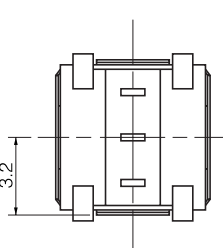
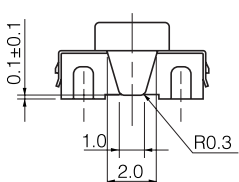
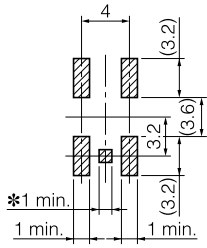
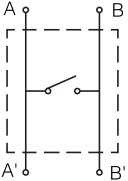
Circuit diagram

Reference of PCB pattern

* This land not necessary when a ground terminal is not used.

Part Numbers	Operating Force	Height	Push Plate Color	Ground Terminal	Operating Life
EVQPHP03T	1.3 N	3.1 mm	Brown	Without	100000 cycles
EVQPHV03T	1.6 N	3.1 mm	Brown	Without	100000 cycles
EVQPHU03T	2.6 N	3.1 mm	Brown	Without	50000 cycles
EVQPHL03T	1.3 N	3.1 mm	Brown	With	100000 cycles
EVQPHN03T	1.6 N	3.1 mm	Brown	With	100000 cycles
EVQPHK03T	2.6 N	3.1 mm	Brown	With	50000 cycles

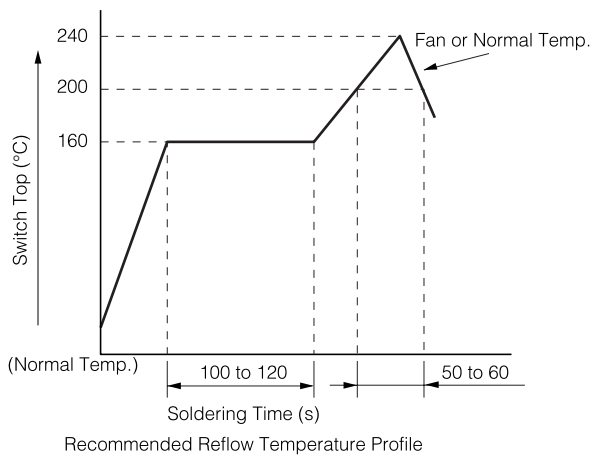
■ Dimensions in mm (not to scale)

No. 2 EVQQW (Embossed Taping) With push plate Surface mount For reflow soldering With ground terminal Without ground terminal Notes: 1. Non-washable in solvents 2. Types with ground terminal available 	     Reference of PCB pattern  Circuit Diagram <table><tr><th>Height</th></tr><tr><td>H</td></tr><tr><td>2.0±0.2</td></tr><tr><td>2.5±0.2</td></tr><tr><td>3.1^{+0.3}_{-0.1}</td></tr></table> * This land not necessary when a ground terminal is not used.	Height	H	2.0±0.2	2.5±0.2	3.1 ^{+0.3} _{-0.1}
Height						
H						
2.0±0.2						
2.5±0.2						
3.1 ^{+0.3} _{-0.1}						
Part Numbers	Operating Force	H=Height	Push Plate Color	Ground Terminal	Operating Life	
EVQQWP01W	1.3 N	2.0 mm	White	Without	1000000 cycles	
EVQQWP02W	1.3 N	2.5 mm	White	Without	1000000 cycles	
EVQQWP03W	1.3 N	3.1 mm	White	Without	1000000 cycles	
EVQQWS01W	1.6 N	2.0 mm	White	Without	1000000 cycles	
EVQQWS02W	1.6 N	2.5 mm	White	Without	1000000 cycles	
EVQQWS03W	1.6 N	3.1 mm	White	Without	1000000 cycles	
EVQQWT01W	2.6 N	2.0 mm	White	Without	100000 cycles	
EVQQWT02W	2.6 N	2.5 mm	White	Without	100000 cycles	
EVQQWT03W	2.6 N	3.1 mm	White	Without	100000 cycles	
EVQQWM01W	1.3 N	2.0 mm	White	With	1000000 cycles	
EVQQWM02W	1.3 N	2.5 mm	White	With	1000000 cycles	
EVQQWM03W	1.3 N	3.1 mm	White	With	1000000 cycles	
EVQQWN01W	1.6 N	2.0 mm	White	With	1000000 cycles	
EVQQWN02W	1.6 N	2.5 mm	White	With	1000000 cycles	
EVQQWN03W	1.6 N	3.1 mm	White	With	1000000 cycles	
EVQQWK01W	2.6 N	2.0 mm	White	With	100000 cycles	
EVQQWK02W	2.6 N	2.5 mm	White	With	100000 cycles	
EVQQWK03W	2.6 N	3.1 mm	White	With	100000 cycles	

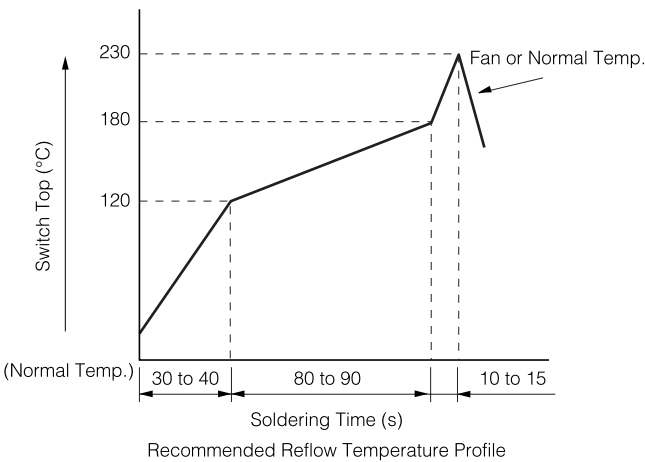
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Recommended Reflow Soldering Conditions

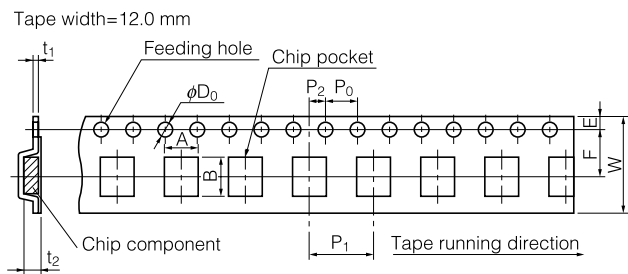
Type EVQPH



Type EVQQW

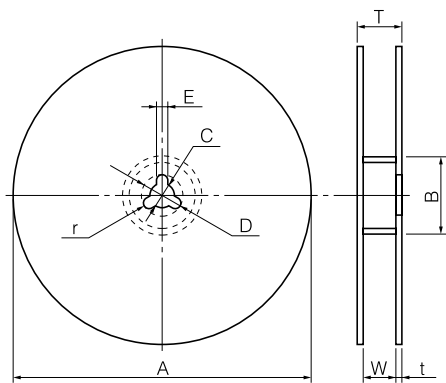


Embossed Carrier Taping



Part No.	Height	A	B	W	F	E	P ₁	P ₂	P ₀	D ₀ Dia.	t ₁	t ₂
EVQPH	3.1	7.0±0.2	7.5±0.2	12.0±0.3	5.5±0.1	1.75±0.10	8.0±0.1	2.0±0.1	4.0±0.1	1.5 ^{+0.1} ₀	0.30±0.05	3.2±0.2
EVQQW	2.0											2.2±0.2
	2.5/3.1											3.2±0.2

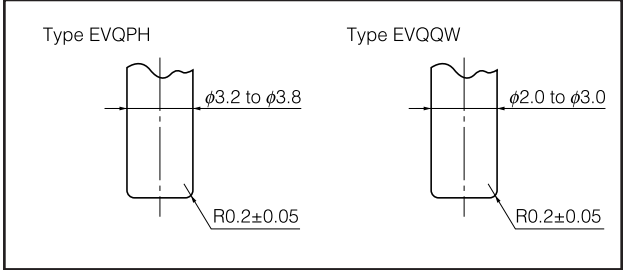
Standard Reel Dimensions in mm (not to scale)



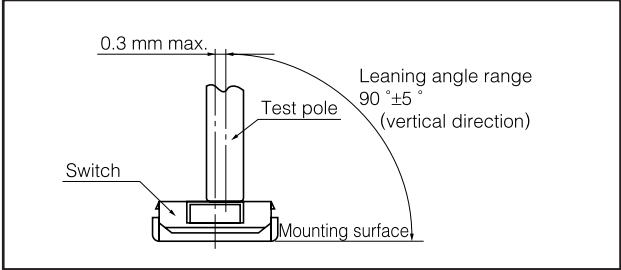
Item	A	B	C	D	E
Rate (mm)	φ370.0±2.0	φ50.0 min.	φ13.0±0.5	φ21.0±1.0	2.0±0.5

Item	W	T	t	r
Rate (mm)	14.0±1.5	—	1.0 to 3.0	1.0±0.5

Recommended Shape of Test Pole



Recommended Operating Conditions



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