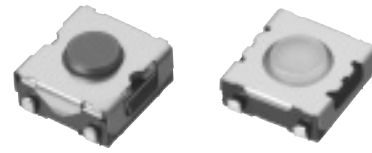


2 mm Thick SMD Light Touch Switches
for Reflow Soldering (With Push Plate)

Japan

Type: **EVQPH/EVQQX**



Surface-mount type with a push plate

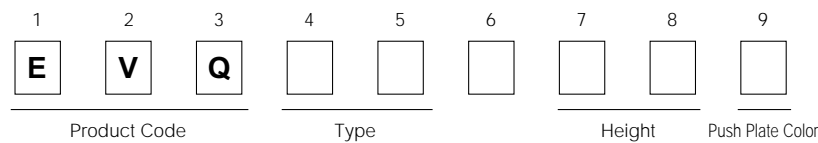
■ Features

- 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	
Profile	Packaging	Taping		Taping	
		L=2.0, 2.5, 3.1 mm		L=3.1 mm	
Operating Force	Ground terminal	Without	With	Without	With
	1.3 N	EVQQXP	EVQQXM	EVQPHN	EVQPHL
	1.6 N	EVQQXS	EVQQXN	EVQPHV	EVQPHN
2.6 N	EVQQXT	EVQQXK	EVQPHU	EVQPHK	


■ Specifications

Type		Snap action / Push-on type SPST	
Electrical	Rating	20 mA 15 Vdc max. (Resistive load)	
	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	1.3 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.
		EVQQX	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. Embossed Taping (Reel Pack)	
	H=2.5 mm, 3.1 mm	2000 pcs. Embossed Taping (Reel Pack)	
Quantity/Carton	H=2.0 mm	20000 pcs.	
	H=2.5 mm, 3.1 mm	10000 pcs.	

Note: Non washable

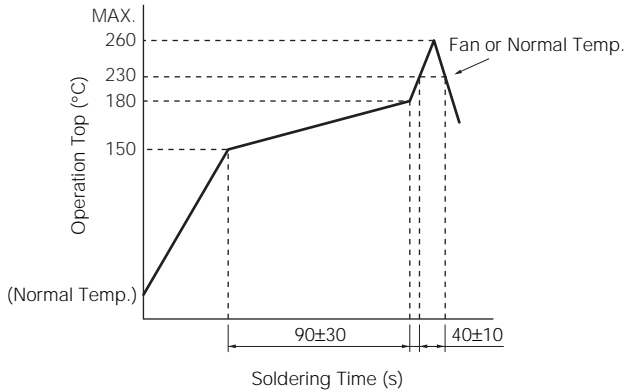
Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

■ Dimensions in mm (not to scale)

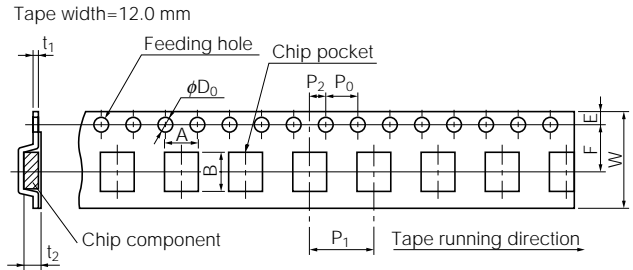
<p>No. 1</p> <p>EVQPH (Embossed Taping)</p> <p>With push plate Surface mount For reflow soldering With ground terminal Without ground terminal</p> <p>Notes: 1. Non-washable in solvents 2. Types with ground terminal available</p> 	<p style="text-align: center;">Circuit diagram</p> <p style="text-align: center;">Reference of PWB pattern</p> <p style="text-align: right;">* This land not necessary when a ground terminal is not used.</p>				
<p>Part Numbers</p>	<p>Operating Force</p>	<p>Height</p>	<p>Push Plate Color</p>	<p>Ground Terminal</p>	<p>Operating Life</p>
<p>EVQPHP03T</p>	<p>1.3 N</p>	<p>3.1 mm</p>	<p>Brown</p>	<p>Without</p>	<p>100000 cycles</p>
<p>EVQPHV03T</p>	<p>1.6 N</p>	<p>3.1 mm</p>	<p>Brown</p>	<p>Without</p>	<p>100000 cycles</p>
<p>EVQPHU03T</p>	<p>2.6 N</p>	<p>3.1 mm</p>	<p>Brown</p>	<p>Without</p>	<p>50000 cycles</p>
<p>EVQPHL03T</p>	<p>1.3 N</p>	<p>3.1 mm</p>	<p>Brown</p>	<p>With</p>	<p>100000 cycles</p>
<p>EVQPHN03T</p>	<p>1.6 N</p>	<p>3.1 mm</p>	<p>Brown</p>	<p>With</p>	<p>100000 cycles</p>
<p>EVQPHK03T</p>	<p>2.6 N</p>	<p>3.1 mm</p>	<p>Brown</p>	<p>With</p>	<p>50000 cycles</p>

Recommended Reflow Soldering Conditions

- Type EVQPH
- Type EVQQX



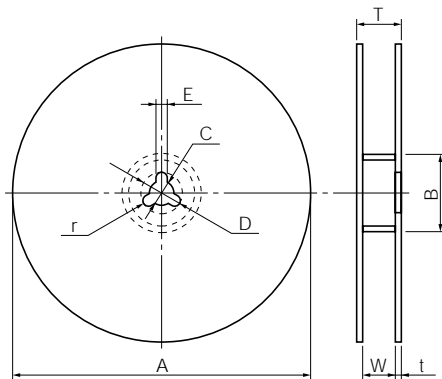
Embossed Carrier Taping



Unit: mm

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
EVQQX	2.0											2.2±0.2
		2.5/3.1										3.2±0.2

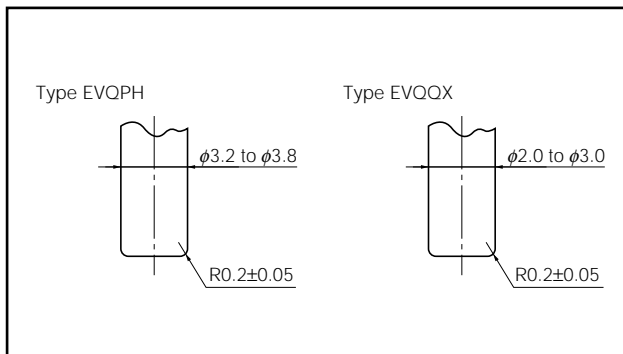
Standard Reel Dimensions in mm (not to scale)



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

