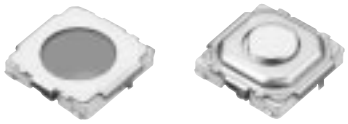
Super Thin Surface Mount Light Touch Switches for Reflow Soldering

Japan

Type: **EVQPL**

Super small-sized, surface-mount type with a push plate



■ Features

- Super thin and small-sized:
  Height: 0.8 mm, Outer dimensions: □4.9 mm
- Short push travel with excellent clear tactile feeling
- High contact reliability due to sealed structure
- Long operating life due to stainless steel diaphragm

■ Recommended Applications

- Operating switches for Camcorders, Headphone Stereos

■ Explanation of Part Numbers

1	2	3	4	5	6	7	7	8
E	V	Q	P	L		A		
Product Code			Shape & Structure				Height	

■ Product Chart

Height	H=0.8 mm	H=1.5 mm (With Push Plate)
Packaging / Operating Force	Embossed	Embossed
1.0 N	EVQPLB	EVQPLD
1.6 N	EVQPLF	EVQPLH
2.6 N	EVQPLK	EVQPLM

■ 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 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±0.5 N 1.6 N±0.5 N	2.6 N±0.6 N
	Travel	0.25 mm $^{+0.10}_{-0.20\ mm}$	
Endurance	Operating Life	500000 cycles min.	200000 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		5000 pcs. (Reel Pack)	
Quantity/Carton		25000 pcs.	

Note: Non washable

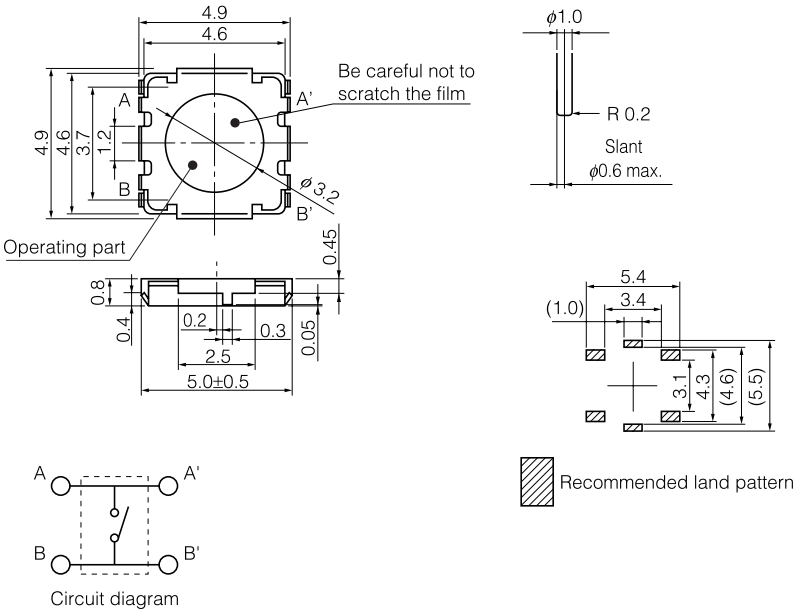
■ Dimensions in mm (not to scale)

No. 1

EVQPLB
EVQPLF
EVQPLK

(Embossed Taping)

Surface mount
For reflow soldering
Without push plate



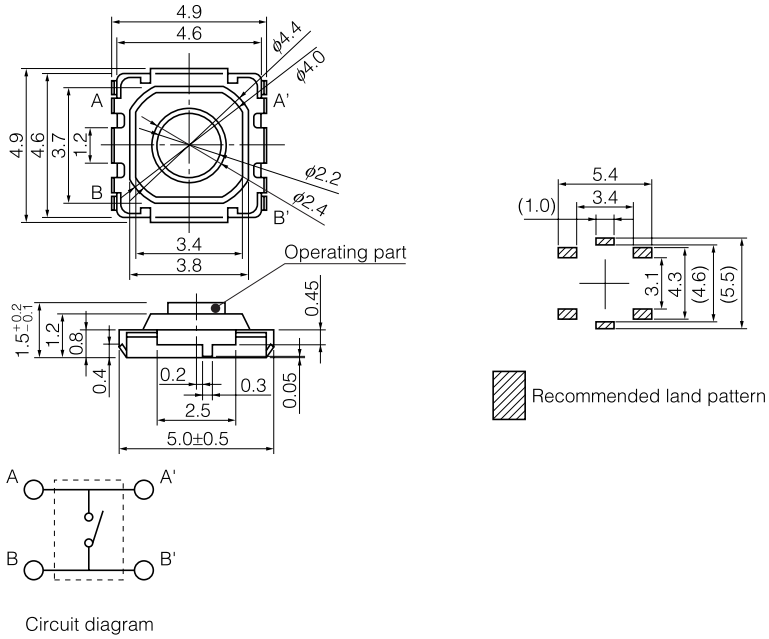
Part Numbers	Operating Force	Height	Operating Life
EVQPLBA08	1.0 N	0.8 mm	500000 cycles
EVQPLFA08	1.6 N	0.8 mm	500000 cycles
EVQPLKA08	2.6 N	0.8 mm	200000 cycles

No. 2

EVQPLD
EVQPLH
EVQPLM

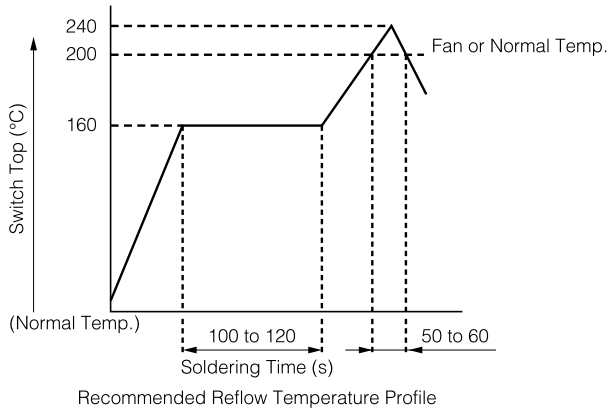
(Embossed Taping)

Surface mount
For reflow soldering
With push plate



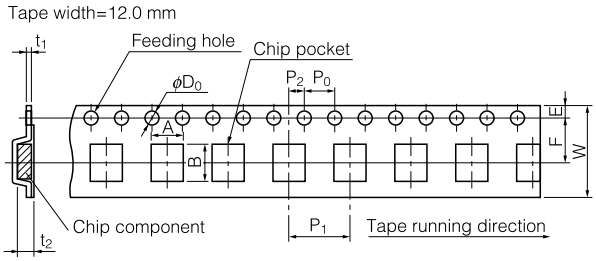
Part Numbers	Operating Force	Height	Operating Life
EVQPLDA15	1.0 N	1.5 mm	500000 cycles
EVQPLHA15	1.6 N	1.5 mm	500000 cycles
EVQPLMA15	2.6 N	1.5 mm	200000 cycles

■ Recommended Reflow Soldering Conditions



Recommended Reflow Temperature Profile

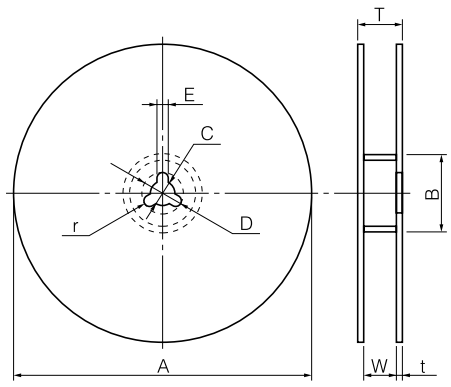
● Embossed Carrier Taping



Unit: mm

Part No.	Height	A	B	W	F	E	P_1	P_2	P_0	D_0 Dia.	t_1	t_2
EVQPL	0.8/1.5	5.0±0.2	5.0±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	$1.5^{+0.1}_{0}$	0.35±0.05	1.0/1.7±0.2

● Standard Reel Dimensions in mm (not to scale)

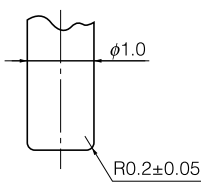


Item	A	B	C	D	E
Rate (mm)	φ370.0±2.0	φ50.0 min.	φ13.0±0.5	φ21.0±1.0	2.0±0.5

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

for Reflow soldering type



■ Recommended Operating Conditions