

Super Small-sized Surface Mount Light Touch Switches

Japan

Type: **EVQPQ**

Super small-sized, thin profile, surface-mount type



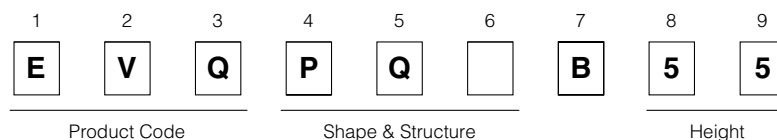
■ Features

- Super small-sized, thin profile, SMD
(Outer dimensions: □4.5 mm, Thickness: 0.55 mm)
- Lightweight: 20 mg (1/2 compared with conventional type)
- Reflow soldering available

■ Recommended Applications

- Operation switches for Headphone Stereos, Camcorders
- Operation switches for Cellular Telephones, Pagers
- Operation switches for Car Audio Equipment

■ Explanation of Part Numbers



■ Major Specifications

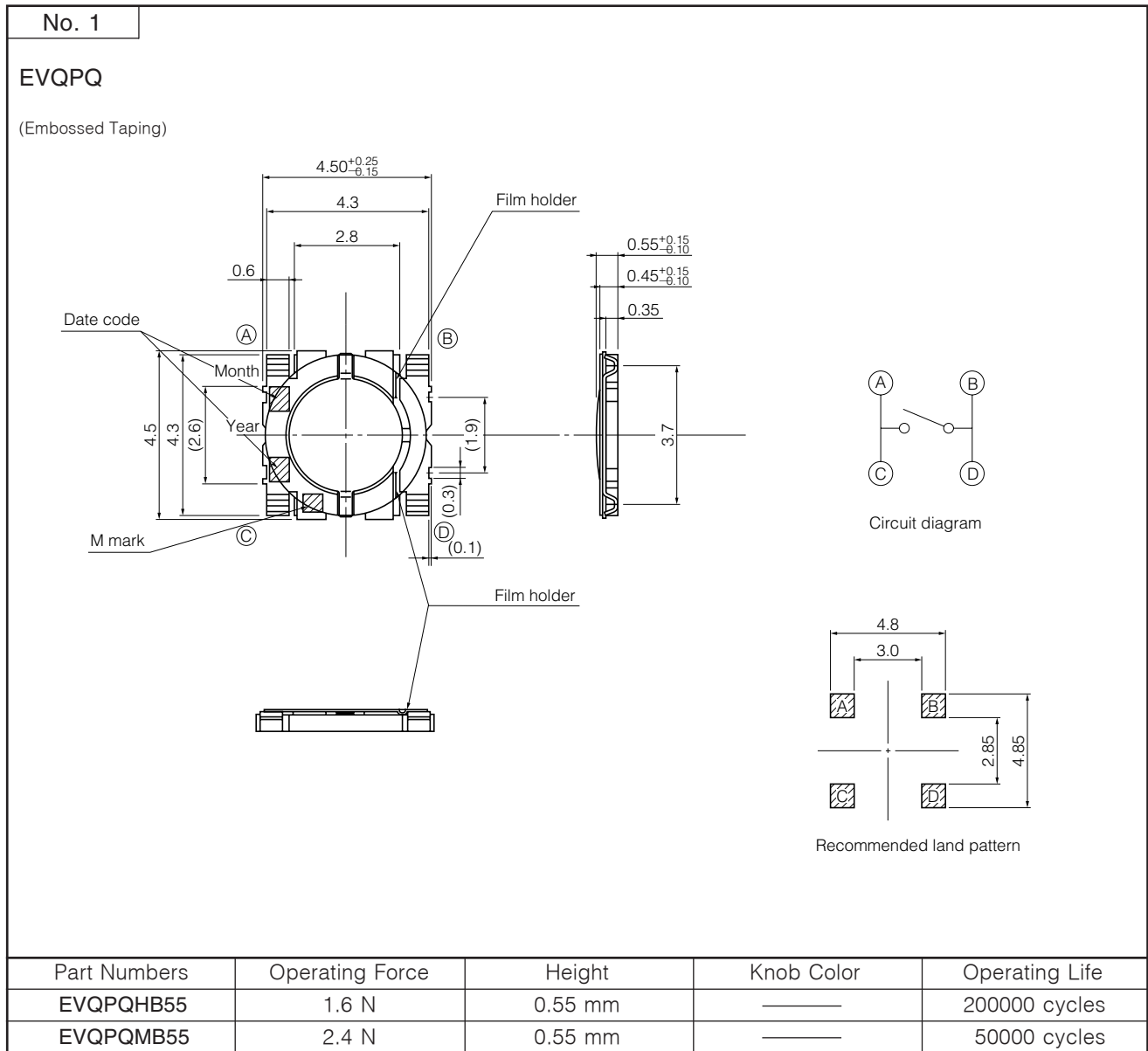
Type	Snap action/Push-on type SPST	
Electrical	Rating	20 mA 15 Vdc (Resistive load)
	Contact Resistance	100 mΩ max.
	Insulation Resistance	50 MΩ min. (at 100 Vdc)
	Dielectric Withstanding Voltage	100 Vac for 1 minute
	Bouncing	ON : 3 ms max. OFF: 10 ms max.
Mechanical	Operating Force	1.6 N±0.5 N 2.4 N±0.6 N
	Travel	0.2 mm±0.1 mm
Endurance	Operating Life	200000 cycles min. (1.6 N), 50000 cycles min. (2.4 N)
	Operating Temperature	-20 °C to +70 °C (45 % to 85 % RH)
Minimum Quantity/Packing Unit		10000 pcs. (Reel Pack)
Quantity/Carton		50000 pcs.

Note: Non washable

Rev.02/04

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)



■ Before using this product

- Design the setting side of the operation section (form of actuator) as show in Fig.1. The toleration range of inclination of the actuator is 4 degrees. (See the Fig.2)
- If the inclination of the actuator is widened by using soft materials, such as rubber, for the setting side of the operation section (connecting area between button and actuator), it may cause functional problems.
- Gap in a core between the switch and the operation section should be within 0.4 mm.

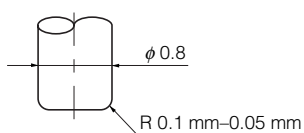


Fig.1

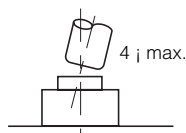
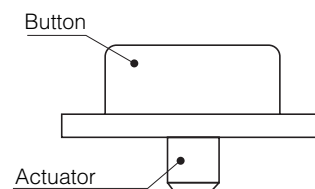
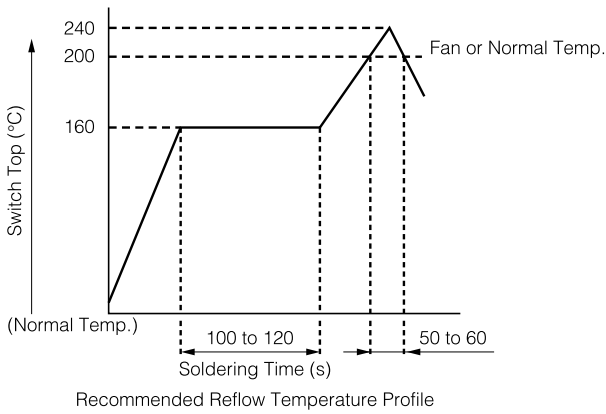


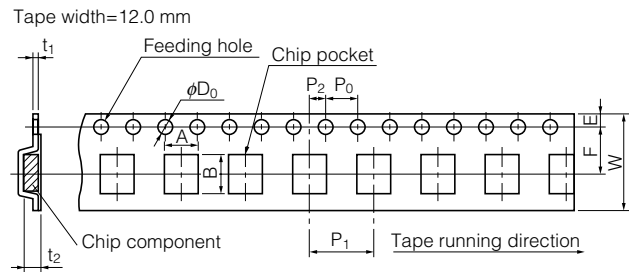
Fig.2



Recommended Reflow Soldering Conditions



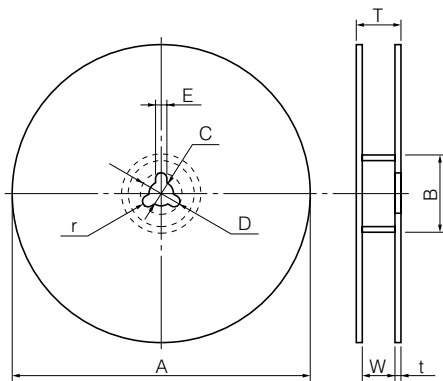
Embossed Carrier Taping



Unit: mm

Part No.	Height	A	B	W	F	E	P ₁	P ₂	P ₀	D ₀ Dia.	t ₁	t ₂
EVQPQ	0.55	5.0 ^{+0.30} _{-0.25}	4.5 ^{+0.3} ₋₀	12.0±0.1	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	0.65 ^{+0.2} _{-0.1}

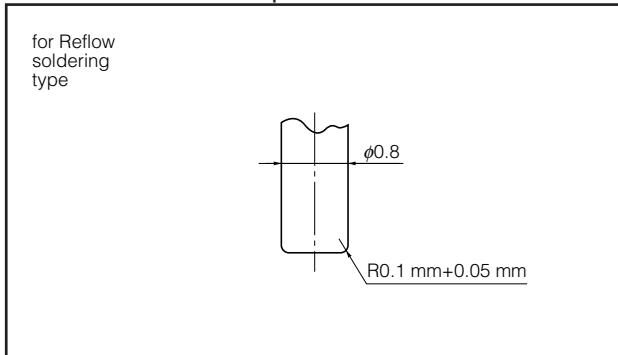
Standard Reel Dimensions in mm (not to scale)



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

