# 4.7 mm×3.5 mm SMD Light Touch Switches

# Type: EVQP2/EVQP9/EVQ3P2

# ■ Features

● External dimensions: 4.7 mm×3.5 mm,

Height: Middle Push Travel 2.5 mm

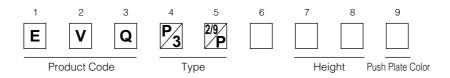
Short Push Travel 2.1 mm, 2.5 mm

- High operating force and long operational life
- High mountability with J-bent (4 terminals)



- Operation switches for portable electronic equipment (Mobile phones, Digital still cameras, Camcorders, Portable audio players, etc.)
- Keyless entry systems (automotive)
- Car audio equipment

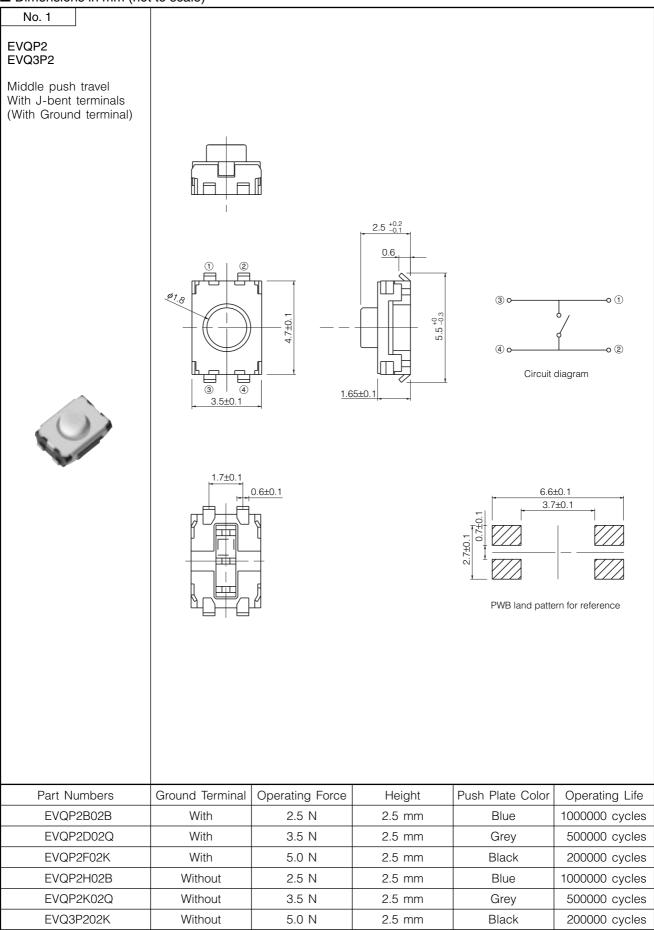
## ■ Explanation of Part Numbers



### ■ Specifications

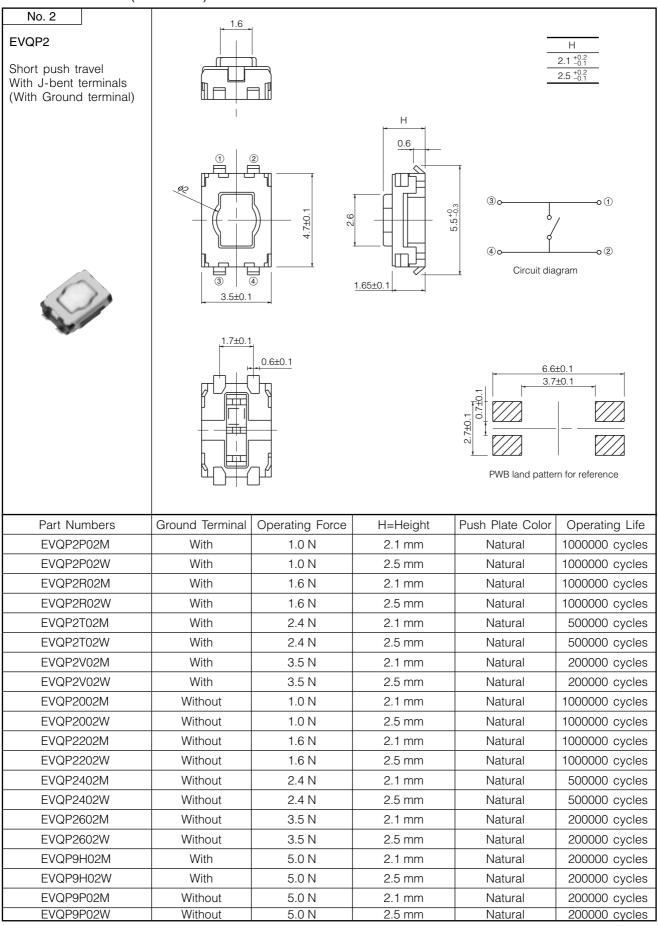
	Middle Push Travel	Short Push Travel			
	Snap action / Push-on type SPST				
Rating	10 μA 2 Vdc to 20 mA 15 Vdc (Resistive load)				
Contact Resistance	100 mΩ max.				
Insulation Resistance	100 MΩ min.				
Dielectric Withstanding Voltage	250 Vac (1 minute)				
Bouncing	10 ms max. (ON, OFF)				
Operating Force	2.5 N, 3.5 N, 5.0 N	1.0 N, 1.6 N, 2.4 N, 3.5 N, 5.0 N			
Travel	0.70 mm±0.20 mm	0.25 mm <sup>+0.05</sup> <sub>-0.15</sub> mm			
Operating Life	2.5 N:1000000 cycles min. 3.5 N: 500000 cycles min. 5.0 N: 200000 cycles min.	1.0 N, 1.6 N: 1000000 cycles min. 2.4 N: 500000 cycles min. 3.5 N: 200000 cycles min. 5.0 N: 200000 cycles min.			
erature	-40 °C to +85 °C				
ature	-40 °C to +85 °C (Bulk) -20 °C to +60 °C (Taping)				
ty/Packing Unit	4000 pcs. Embossed Taping (Reel Pack)				
	20000 pcs.				
	Contact Resistance Insulation Resistance Dielectric Withstanding Voltage Bouncing Operating Force Travel Operating Life erature	Rating       10 μA 2 Vdc to 20 mA         Contact Resistance       100 ms         Insulation Resistance       100 M         Dielectric Withstanding Voltage       250 Vac (         Bouncing       10 ms max         Operating Force       2.5 N, 3.5 N, 5.0 N         Travel       0.70 mm±0.20 mm         Operating Life       3.5 N: 500000 cycles min.         So N: 200000 cycles min.       5.0 N: 200000 cycles min.         Serature       -40 °C to +40 °			

#### ■ Dimensions in mm (not to scale)



# **Panasonic**

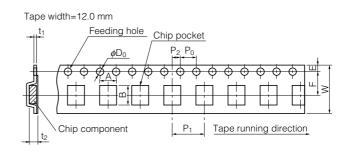
#### ■ Dimensions in mm (not to scale)



## ■ Recommended Reflow Soldering Conditions

# MAX. 260 Fan or Normal Temp. 230 Operation Top (°C) 180 150 (Normal Temp.) 90±30 40±10 Soldering Time (s)

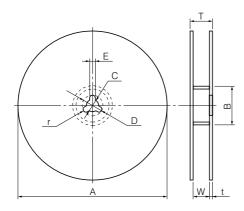
#### Embossed Carrier Taping



Unit: mm

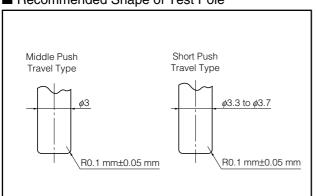
Part No.	Height	А	В	W	F	E	P <sub>1</sub>	P <sub>2</sub>	P <sub>0</sub>	D₀ Dia.	t1	t <sub>2</sub>
EVQP2 EVQP9 EVQ3P2	2.1 2.5	6.0±0.2	4.7±0.2	12.0±0.3	5.5±0.1	1.75±0.10	8.0±0.1	2.0±0.1	4.0±0.1	1.5 <sup>+0.1</sup>	0.3±0.1	2.7±0.2

### Standard Reel Dimensions in mm (not to scale)



Item	Α	В	С	D	Е
Rate (mm)	φ370.0±2.0	φ50.0 min.	φ13.0±0.5	φ21.0±1.0	2.0±0.5
Item	W	Т	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

