# **Panasonic**

## 3.0 mm×2.0 mm SMD Light Touch Switches

Type: **EVPAW** 



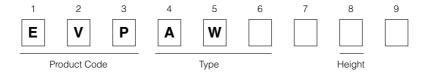
### ■ Features

- External dimensions: 3.0 mm×2.0 mm, Height 0.6 mm
- High operability Equipped with an actuator (push plate)
- IP67 characteristic

## ■ Recommended Applications

• Operation switches for portable electronic equipment (Mobile phone, Portable audio)

## ■ Explanation of Part Numbers



## ■ Specifications

Туре		Snap action/Push-on type SPST				
	Rating	10 μA 2 Vdc to 20 mA 15 Vdc (Resistive load)				
Electrical	Contact Resistance	500 mΩ max.				
	Insulation Resistance	50 M $\Omega$ min. (at 100 Vdc)				
	Dielectric Withstanding Voltage	250 Vac for 1 minute				
	Bouncing	10 ms max. (ON, OFF)				
Mechanical	Operating Force	1.6 N, 2.4 N, 3.3 N				
	Travel	1.6 N, 2.4 N : 0.13 mm 3	.3 N : 0.15 mm			
Endurance	Operating Life	1.6 N, 2.4 N : 500000 cycles min. 3	.3N : 300000 cycles min.			
ID07/*1)	IP6x (Dust resistance)	Dust : Talc (Type4) 8h				
IP67(*1)	IPx7 (Water resistance)	Immersion depth : 1m 30min.				
Operating Temperature		−40 °C to +85 °C				
Storage Temperature		-40 °C to +85 °C (Bulk) -20 °C to +60 °C (Taping)				
Minimum Quantity/Packing Unit		10000 pcs. Embossed Taping (Reel Pack)				
Quantity/Carton		50000 pcs.				

Note: Non washable

(\*1) IP67: Switch shall not be operated during test.

Water or dust ingress shall be limited enough to prevent deleterious effect to the switch function.

However, IP67 shall be guaranteed under single product state,
then there is a possibility that IP67 performance become impaired depending on your mounting condition or usage.

So, please ask us in advance, if the switch is applied to important usage for water and dust resistant.

EVPAWEA2A

## ■ Dimensions in mm (not to scale) **EVPAW** (Embossed Taping) General dimension tolerance : $\pm 0.05$ () dimensions are reference dimensions. This reference specifications are subject to change. 0.6±0.1 (0.385)without the film and remainder of the gate $(\phi 0.85)$ А 0—0 Circuit diagram (0.04)2-3.69 3 Without film 2-2.85 2-0. 3.5 0.1 max. Stencil mask plan 3.8 X Ø PWB land pattern for reference Soldering thickness t=0.08±0.01 \*Soldering failure may occur depending on applied solder amount, so, please consider to use our recommended stencil and land pattern desing. Operating Force Part Numbers Height Operating Life EVPAWBA2A 1.6 N 0.6 mm 500000 cycles EVPAWCA2A 2.4 N 0.6 mm 500000 cycles

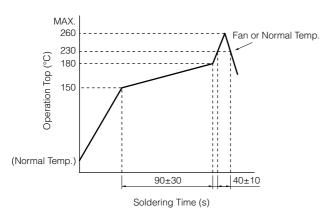
0.6 mm

3.3 N

300000 cycles

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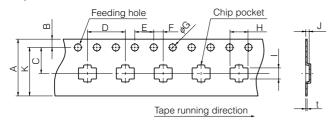
## ■ Recommended Reflow Soldering Conditions



\*Reflow temperature may vary by location even in the same reflow condition. Please check the reflow temperature at terminals and at the top of a switch to make sure the both temperatures are withiin the specification. If even one of them is out of the specifications, please adjust.

## Embossed Carrier Taping

Tape width=12.0 mm



Taping condition: Lack of products in the middle of taping should be one MAX, but total quantity specified in the specifications should be secured.

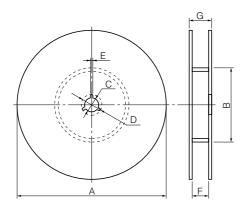
Peeling off strength of top tape: It should be within 0.2N to 1. ON at 165 degree in peeling off angle.

Joint of carrier tape: One joint per one reel may exist.

Unit: mm

Part No.	Height	Α	В	С	D	E	F	G	Н	I	J	K	t
EVPAW	0.6	12.0±0.3	1.75±0.10	5.5±0.1	8.0±0.1	4.0±0.1	2.0±0.1	1.5±0.3	3.8±0.2	2.3±0.2	0.75±0.20	(10.25)	0.3+0.15

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



Item	А	В	С	D	E
Rate (mm)	φ380.0±2.0	φ80.0±1.0	φ13.0±0.5	φ21.0±1.0	2.0±0.5
	_	_	1		
Item	F	G			
Rate (mm)	13.5±1.0	17.5±1.0			