imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Panasonic

4.5 mm×2.2 mm Side-operational Edge Mount

Light Touch Switches
Type: **EVPAE**



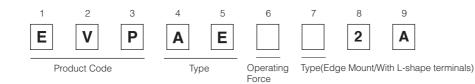
Features

- External dimensions : 4.5 mm×2.25 mm (Excluding the push plate), Height 2.9 mm (Printed circuit board being as low as 0.95 mm)
- Improved soldering strength in the operating direction
- Long operational life
- Measure against electro static discharge(ESD)

Recommended Applications

 Operation switches for portable electronic equipment (Mobile phones, Digital still cameras, Camcorders Portable audio players, etc.)

Explanation of Part Numbers



Specifications

Туре		Snap action / Push-on type SPST					
Electrical	Rating	10 µA 2 V DC to 20 mA 15 V DC (Resistive load)					
	Contact Resistance	1,000 mΩ max.					
	Insulation Resistance	100 MΩ min. (at 100 V DC)					
	Dielectric Withstanding Voltage	250 V AC for 1 minute					
	Bouncing	10 ms max. (ON, OFF)					
Mechanical	Operating Force	1.6 N, 2.4 N, 3.0 N, 3.5 N					
	Push Travel	1.6 N, 2.4 N, 3.0 N, 3.5 N : 0.15 mm 1.6 N (With L-shape terminals) : 0.13 m					
	Push Strength	50 N (1 minute)					
Endurance	Operating Life	200,000 cycles min.					
Operating Ter	nperature	-40 °C to +85 °C					
Storage Temperature		-40 °C to +85 °C (Bulk)					
		-20 °C to +60 °C (Taping)					
Minimum Quantity/Packing Unit		3,500 pcs. Embossed Taping (Reel Pack)					
Quantity/Carton		17,500 pcs.					

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.

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Dimensions in mm (not to scale)

Dimensions in mm (not									
No. 1	General dimension toler								
EVPAE	() dimensions are reference dimensions. (1) (2) (1) (2) (1)								
Edge Mount									
	4.5 Circuit Diagram								
	$\begin{array}{c c} 3.3 \\ \hline 3.6 \\ \hline 0.1 \\ \hline 0.1 \\ \hline 1.5 + 0.1 \\ \hline 1.5 + 0.1 \\ \hline \end{array}$								
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
	$\begin{array}{c c c c c c c c c c c c c c c c c c c $								
	<u>2-0.6±0.1</u>			ut your consideration					
	0.6±0.1								
	PWB land pattern for reference the mounting surface of our switches. * Height from surface of PCB : 0.95 mm 0.95 mm								
Part Numbers	Operating Force	Height	Push Plate Color	Operating Life					
EVPAEBB2A	1.6 N	0.95 mm	Black	200,000 cycles					
EVPAECB2A	2.4 N	0.95 mm	Black	200,000 cycles					
EVPAEDB2A	3.0 N	0.95 mm	Black	200,000 cycles					
EVPAEJB2A	3.5 N	0.95 mm	Black	200,000 cycles					
No. 2	General dimension tolera ()dimensions are referen		(1)						
EVPAE									
With L-shape terminals									
			ФО						
	2.2	<u>0.6±0.1</u>	35 -0.05 -0.10						
		<u>0.43±0.10</u>							
			R0.15						
	3.3		<u>R0.15</u>						
12	3.6-0.10	+ (0.3tp)	<u>3.1±0.1</u>						
	$\begin{array}{c} 3.6^{+0.00} \\ \hline 3.6^{-0.10} \\ \hline 5.55 \\ \hline 9.5 \\ $								
	2.0 ^{+0.2}		GND terminal shall be						
		inserted to th	is hole.						
	$\begin{array}{c} \hline \\ \hline $								
	<u>2-0.6±0.1</u> <u>0.6±0.1</u> Push plate side not to let any burrs of printed (2.3) PWB land pattern for reference the mounting surface of our switches								
Part Numbers	* Height from surface Operating Force	e of PCB : 0.95 mm Height	Push Plate Color	Operating Life					
EVPAEGE2A	1.6 N	0.95 mm	Black	200,000 cycles					
EVPAEGE2A EVPAECE2A	2.4 N	0.95 mm	Black	200,000 cycles 200,000 cycles					
	2.4 IN	0.35 1111	Diach						

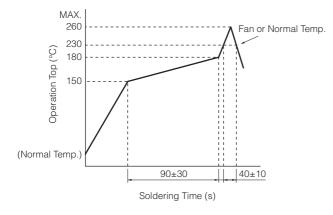
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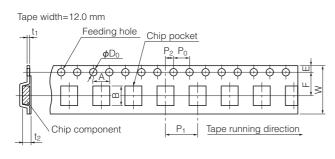
-2-

Panasonic

Recommended Reflow Soldering Conditions



Embossed Carrier Taping



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 1.0N at						
165 degree in peeling off angle.						
Joint of carrier tape : One joint per one reel may exist.						

												Unit: mm
Part No.	Height	A	В	W	F	E	P1	P2	P0	D0 Dia	t1	t2
EVPAE	2.9	5.5±0.2	2.9±0.2	12.0±0.3	5.5	1.75±0.10	8.0±0.1	2.0±0.1	4.0±0.1	1.5+0.1	0.3±0.1	3.3±0.20
With L-shape terminals Unit: mm										Unit: mm		
Part No.	Height	A	В	W	F	E	P1	P2	P0	D0 Dia	t1	t2
EVPAE	2.9	6.1±0.2	2.9±0.2	12.0±0.3	5.5	1.75±0.10	8.0±0.1	2.0±0.1	4.0±0.1	1.5+8-1	0.3±0.1	3.3±0.20

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-3-

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