

Product Change Notice: EVP-AF**/EVP-BA**/EVP-OA** Series 3mm x 2.6mm SMD Light Touch Switches

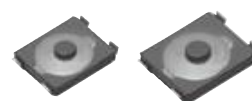
PCN.PG13.7.10.2020

7.10.2020

About This Notice:	Due to low global demand for EVP-AF**/EVP-BA**/EVP-OA** Series 3mm x 2.6mm SMD Light Touch Switches, production will be concentrated in the IFDBU(Tsuyama) factory only.
Effective Date:	March 2021
Change Details:	<p>Change of Manufacturing plant from IFDBU(Tsuyama), PIDMY(Malaysia), PIDQD (China) to only IFDBU (Tsuyama).</p> <p>■ About production lot number indication (change of production plant identification mark)</p> <div> <div> <p>Before change</p> <p>Japan Malaysia China</p> </div> <div> <p>After change</p> <p>Unify to Japan</p> </div> </div>
Affected Parts:	See Attached.
Datasheet(s):	See Attached.
Notes:	Part number, price and specifications remain unchanged.

3.0 mm×2.6 mm SMD Light Touch Switches

Type: **EVPAF/EVP0A**



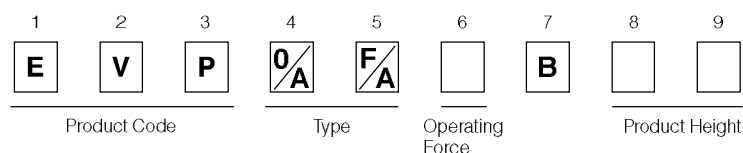
■ Features

- External dimensions: 3.0 mm×2.6 mm, Height 0.65 mm, 0.70 mm
- High operability
Equipped with an actuator (push plate)

■ Recommended Applications

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

■ Explanation of Part Numbers



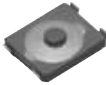
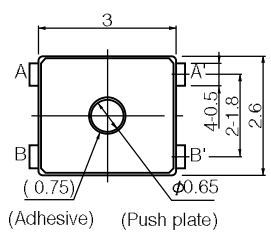
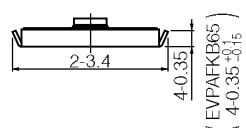
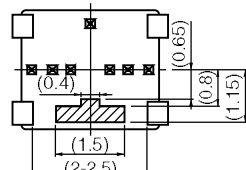
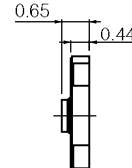
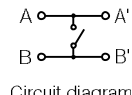
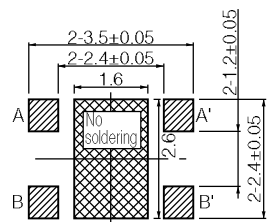


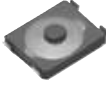
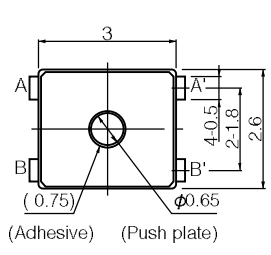
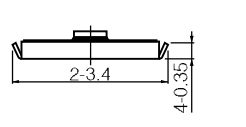
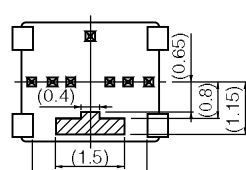
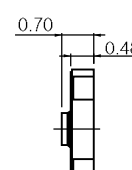
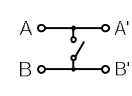
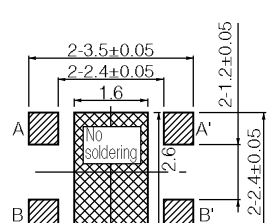


■ Specifications

Type		Snap action/Push-on type SPST
Electrical	Rating	10 μ A 2 V DC to 20 mA 15 V DC (Resistive load)
	Contact Resistance	500 m Ω max.
	Insulation Resistance	50 M Ω min. (at 100 V DC)
	Dielectric Withstanding Voltage	250 V AC for 1 minute
	Bouncing	10 ms max. (ON, OFF)
Mechanical	Operating Force	1.3 N, 1.6 N, 2.4 N, 3.4 N
	Travel	0.15 mm
Endurance	Operating Life	1.3 N, 1.6 N, 3.4 N : 100,000 cycles min., 1.6 N(Low profile) 2.4 N : 500,000 cycles min.
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		8,000 pcs. Embossed Taping (Reel Pack)
Quantity/Carton		40,000 pcs.

Note: Non washable

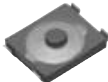
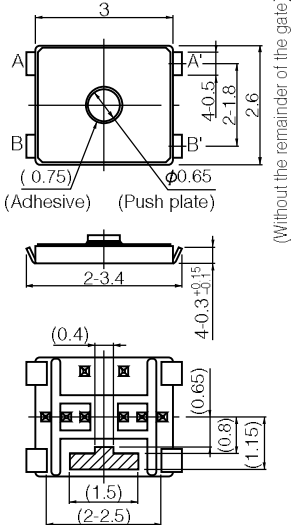
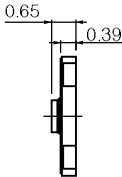
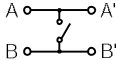
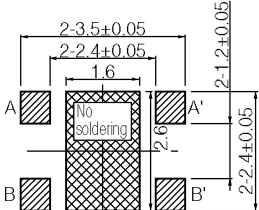


Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.
Should a safety concern arise regarding this product, please be sure to contact us immediately.

■ Dimensions in mm (not to scale)

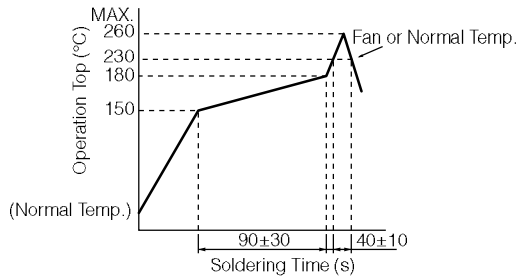
No. 1				
EVPAF (Embossed Taping) With J-bent terminals 	  		<p>General dimension tolerance : ± 0.1 () dimensions are reference dimensions.</p>    PWB land pattern for reference Part of A-A' terminal is exposed at  area. Any land pattern or vias shall not be provided at  area.	
	Part Numbers	Operating Force	Height	Operating Life
	EVPAFKB65	1.3 N	0.65 mm	100,000 cycles
	EVPAFFB65	1.6 N	0.65 mm	100,000 cycles
No. 2				
EVPAF (Embossed Taping) With J-bent terminals 	  		<p>General dimension tolerance : ± 0.1 () dimensions are reference dimensions.</p>    PWB land pattern for reference Part of A-A' terminal is exposed at  area. Any land pattern or vias shall not be provided at  area.	
	Part Numbers	Operating Force	Height	Operating Life
	EVPAF5B70	3.4 N	0.70 mm	100,000 cycles
	EVPAF7B70	2.4 N	0.70 mm	500,000 cycles

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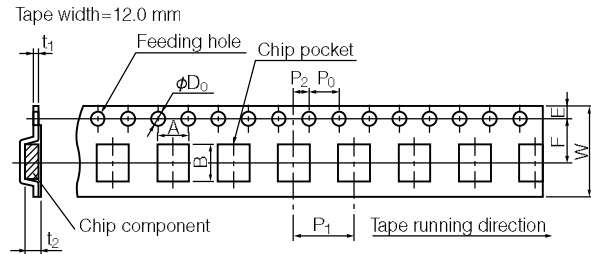
■ Dimensions in mm (not to scale)

No. 3	General dimension tolerance : ± 0.1 () dimensions are reference dimensions.		
EVPAF			
Low profile (Embossed Taping)			
With J-bent terminals			
			 Circuit diagram
			
		PWB land pattern for reference	
		Part of A-A' terminal is exposed at  area. Any land pattern or vias shall not be provided at  area.	
Part Numbers	Operating Force	Height	Operating Life
EVPAF65	1.6 N	0.65 mm	500,000 cycles
EVPAF7B65	2.4 N	0.65 mm	500,000 cycles
EVPAF5B65	3.4 N	0.65 mm	100,000 cycles

■ 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.

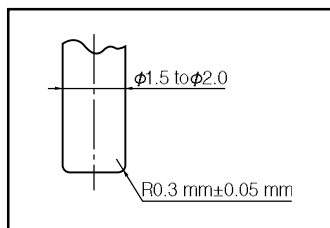
Peeling off strength of top tape : It should be within 0.2N to 1.0N at 165 degree in peeling off angle.

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

Unit: mm

Part No.	Height	A	B	W	F	E	P1	P2	P0	D0 Dia	t1	t2
EVPAF	0.65/0.70	3.75±0.2	2.95±0.2	12.0±0.3	5.5±0.1	1.75±0.1	8.0±0.1	2.0±0.1	4.0±0.1	1.5±0.3	0.3±0.1	0.8±0.2
EVP0AF												

■ Recommended Shape of Test Pole



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Requests to customers

Please refer to "the latest product specifications" when designing your product.

Requests to customers :

<https://industrial.panasonic.com/ac/e/salespolicies/>

Safety Precautions

When using our products, no matter what sort of equipment they might be used for, be sure to confirm the applications and environmental conditions with our specifications in advance.

Please contact

Panasonic Corporation

Electromechanical Control Business Division

■ 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8506, Japan
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3.0 mm×2.6 mm 2 terminals SMD
Light Touch Switches

Type: **EVPBA**



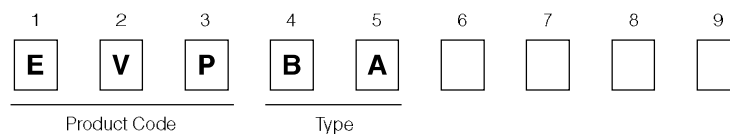
■ Features

- External dimensions: 3.0 mm×2.6 mm, Height 0.58 mm
- High operability
Equipped with an actuator (push plate)

■ Recommended Applications

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

■ Explanation of Part Numbers



■ Specifications

Type		Snap action/Push-on type SPST
Electrical	Rating	10 μ A 2 V DC to 20 mA 15 V DC (Resistive load)
	Contact Resistance	500 m Ω max.
	Insulation Resistance	50 M Ω min. (at 100 V DC)
	Dielectric Withstanding Voltage	250 V AC for 1 minute
	Bouncing	10 ms max. (ON, OFF)
Mechanical	Operating Force	1.8 N
	Travel	0.13 mm
Endurance	Operating Life	300,000 cycles min.
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		20,000 pcs. Embossed Taping (Reel Pack)
Quantity/Carton		100,000 pcs.

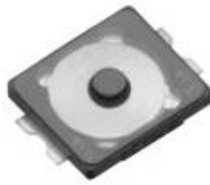
Note: Non washable

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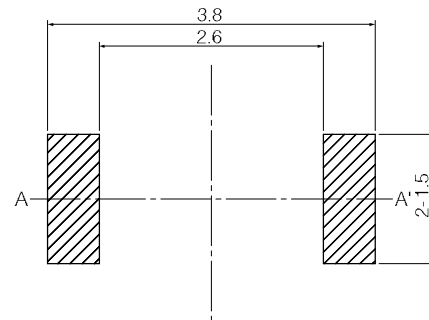
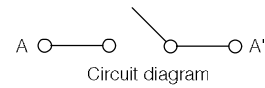
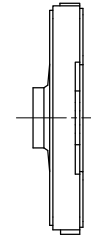
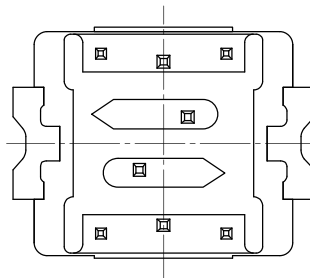
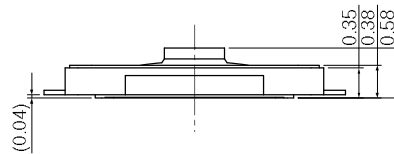
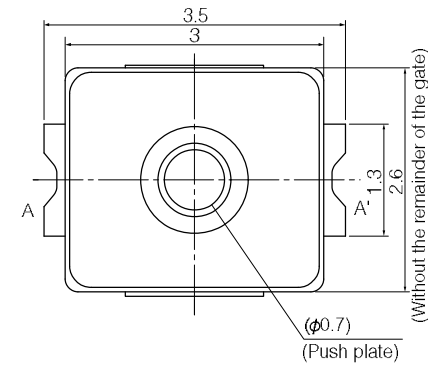
■ Dimensions in mm (not to scale)

EVPBA

(Embossed Taping)



General dimension tolerance : ± 0.1
() dimensions are reference dimensions.



Land pattern plan

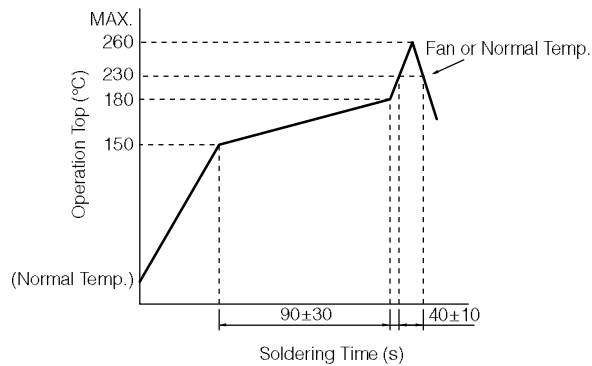
Soldering thickness $t=0.08\pm0.01$

- * The opening ratio of the solder stencil to a land pattern shall be 70%
- * If you design different stencil mask and land pattern, or apply different soldering thickness compared with our recommended pattern as described above, please ask us in advance.

Part Numbers	Operating Force	Height	Operating Life
EVPBABA3A	1.8 N	0.58 mm	300,000 cycles

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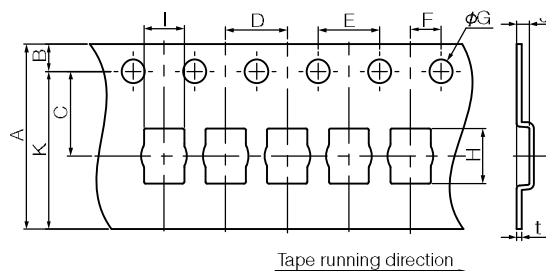
■ Recommended Reflow Soldering Conditions



* 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 within the specification. If even one of them is out of the specifications, please adjust.

● Embossed Carrier Taping

Tape width=12.0 mm (A=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 1.0N at 165 degree in peeling off angle.
 Joint of carrier tape : One joint per one reel may exist.

Unit: mm												
Part No.	Height	A	B	C	D	E	F	G	H	I	J	K
EVPBA	0.58	12.0±0.3	1.75±0.10	5.5±0.1	4.0±0.1	4.0±0.1	2.0±0.1	1.5±0.3	3.75±0.20	2.85±0.20	0.8±0.2	(10.25)
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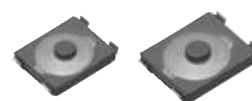
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Panasonic PCN.PG13.7.10.2020 Affected Parts

Affected Series	Affected Part Numbers
EVP-AF*	EVP-AF5B65
	EVP-AF5B70
	EVP-AF7B65
	EVP-AF7B70
	EVP-AFFB65
	EVP-AFFG65
	EVP-AFGB65
	EVP-AFKB65
EVP-BA*	EVP-BABA3A
EVP-0A*	EVP-0AFB65

3.0 mm×2.6 mm SMD Light Touch Switches

Type: **EVPAF/EVP0A**



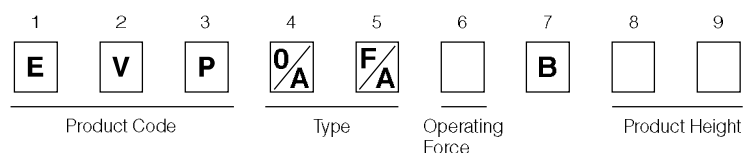
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■ Recommended Applications

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

■ Explanation of Part Numbers



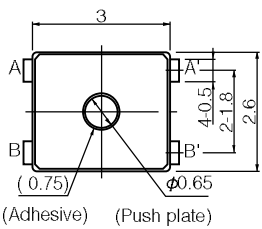
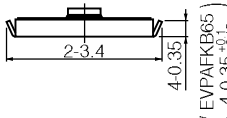
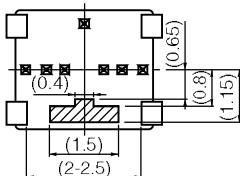
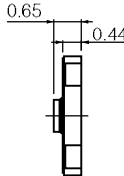
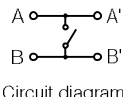
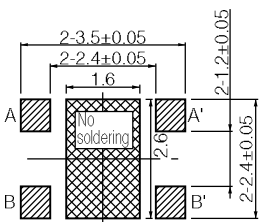


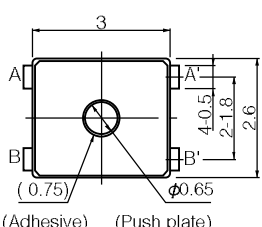
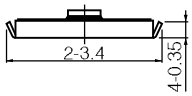
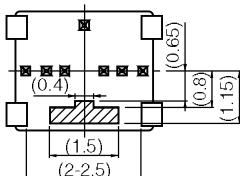
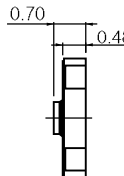
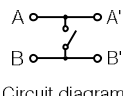
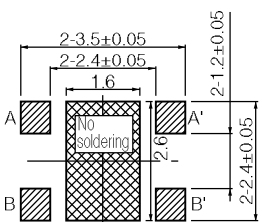


■ Specifications

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	Bouncing	10 ms max. (ON, OFF)
Mechanical	Operating Force	1.3 N, 1.6 N, 2.4 N, 3.4 N
	Travel	0.15 mm
Endurance	Operating Life	1.3 N, 1.6 N, 3.4 N : 100,000 cycles min., 1.6 N(Low profile) 2.4 N : 500,000 cycles min.
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		8,000 pcs. Embossed Taping (Reel Pack)
Quantity/Carton		40,000 pcs.

Note: Non washable

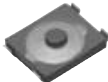
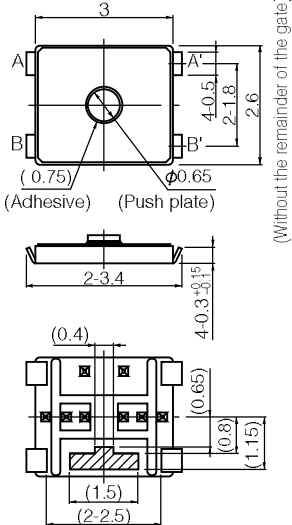
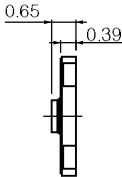
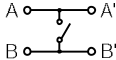
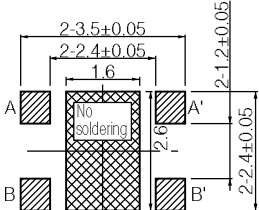
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■ Dimensions in mm (not to scale)

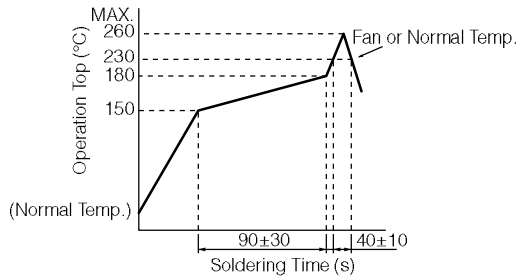
No. 1			
EVPAF (Embossed Taping) With J-bent terminals	  	   PWB land pattern for reference Part of A-A' terminal is exposed at  area. Any land pattern or vias shall not be provided at  area.	General dimension tolerance : ± 0.1 () dimensions are reference dimensions.
Part Numbers	Operating Force	Height	Operating Life
EVPAFKB65	1.3 N	0.65 mm	100,000 cycles
EVPAFFB65	1.6 N	0.65 mm	100,000 cycles
No. 2			
EVPAF (Embossed Taping) With J-bent terminals	  	   PWB land pattern for reference Part of A-A' terminal is exposed at  area. Any land pattern or vias shall not be provided at  area.	General dimension tolerance : ± 0.1 () dimensions are reference dimensions.
Part Numbers	Operating Force	Height	Operating Life
EVPAF5B70	3.4 N	0.70 mm	100,000 cycles
EVPAF7B70	2.4 N	0.70 mm	500,000 cycles

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.

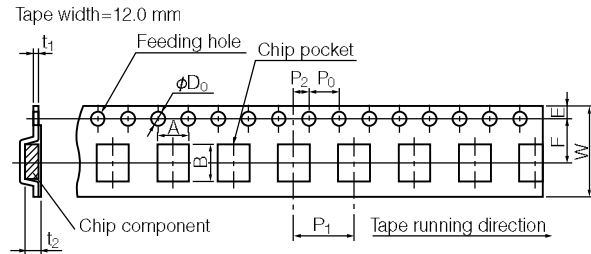
■ Dimensions in mm (not to scale)

No. 3	General dimension tolerance : ± 0.1 () dimensions are reference dimensions.		
EVPAF			
Low profile (Embossed Taping)			
With J-bent terminals			
			 Circuit diagram
			
		Part of A-A' terminal is exposed at area. Any land pattern or vias shall not be provided at area.	
Part Numbers	Operating Force	Height	Operating Life
EVPAF65	1.6 N	0.65 mm	500,000 cycles
EVPAF7B65	2.4 N	0.65 mm	500,000 cycles
EVPAF5B65	3.4 N	0.65 mm	100,000 cycles

■ 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.

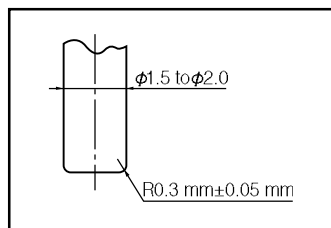
Peeling off strength of top tape : It should be within 0.2N to 1.0N at 165 degree in peeling off angle.

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

Unit: mm

Part No.	Height	A	B	W	F	E	P ₁	P ₂	P ₀	D ₀ Dia	t ₁	t ₂
EVPAF	0.65/0.70	3.75±0.2	2.95±0.2	12.0±0.3	5.5±0.1	1.75±0.1	8.0±0.1	2.0±0.1	4.0±0.1	1.5±0.3	0.3±0.1	0.8±0.2
EVP0AF												

■ Recommended Shape of Test Pole



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Requests to customers

Please refer to "the latest product specifications" when designing your product.

Requests to customers :

<https://industrial.panasonic.com/ac/e/salespolicies/>

Safety Precautions

When using our products, no matter what sort of equipment they might be used for, be sure to confirm the applications and environmental conditions with our specifications in advance.

Please contact

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Electromechanical Control Business Division

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