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!


## Contact us

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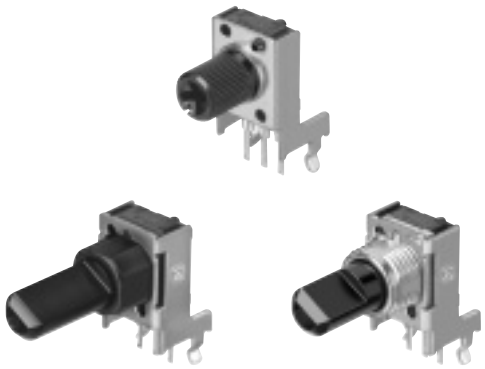
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

# 9 mm Square Rotary Potentiometers with Insulated Shaft

Type: **EVUE/EVUF**

Japan
Malaysia



## ■ Features

- Multi-gang block can be provided upon request
- DC voltage available
- Rigid rectangular shape suited for automatic insertion

## ■ Recommended Applications

- Audio Equipment
- Video Equipment
- Electronic Musical Instruments
- Audio Mixers

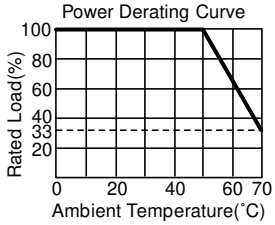
## ■ Explanation of Part Numbers

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| E | V | U | E/F | | | | | | | | |
| Product Code | | | Specifications | | | Shaft Trims & Dimensions | | | Taper & Resistance | | |

## ■ Product Chart

| Construction | Style | Height (H=mm) | Detent | Type |
|---|---|---|---|---|
| Horizontal | Without bushing | 6.5 | Without detent | EVUE20 |
| | | | Midpoint | EVUE30 |
| | | 10.0 | Without detent | EVUE2A |
| | | | Midpoint | EVUE3A |
| | | 12.5 | Without detent | EVUE21 |
| | | | Midpoint | EVUE31 |
| | With bushing | 6.5 | Without detent | EVUE25 |
| | | | Midpoint | EVUE35 |
| | | 10.0 | Without detent | EVUE2J |
| | | | Midpoint | EVUE3J |
| | With sleeve | 6.5 | Without detent | EVUE27 |
| | | | Midpoint | EVUE37 |
| | | 10.0 | Without detent | EVUE2K |
| | | | Midpoint | EVUE3K |
| Vertical | Without bushing | — | Without detent | EVUF2A |
| | | | Midpoint | EVUF3A |
| | With bushing | 7.5 | Without detent | EVUF2J |
| | | | Midpoint | EVUF3J |
| | | 8.5 | Without detent | EVUF2M |
| | | | Midpoint | EVUF3M |
| | With sleeve | 7.5 | Without detent | EVUF2K |
| | | | Midpoint | EVUF3K |
| | | 8.5 | Without detent | EVUF2L |
| | | | Midpoint | EVUF3L |

## ■ Specifications

<table>
<tr><th>Classification</th><th>Item</th><th>Type without bushing</th><th>Type with bushing</th><th>Type with sleeve</th></tr>
<tr><td rowspan="6">Mechanical Specifications</td><td>Rotation Angle</td><td colspan="3">300 °</td></tr>
<tr><td>Rotation Torque</td><td>1 mN·m to 8 mN·m (after rotation started)</td><td>1 mN·m to 20 mN·m (after rotation started)</td><td>1 mN·m to 20 mN·m (after rotation started)</td></tr>
<tr><td>Shaft Stopper Strength</td><td colspan="3">300 mN·m</td></tr>
<tr><td>Shaft wobble</td><td>● Shaft bend and shaft wobble shall be $0.8 \times \frac{L}{20}$ (mm) max. (for one side)<br>( When moment of 25 mN·m is applied. )<br>● L= Distance between mounting surface and measuring point</td><td>● Shaft bend and shaft wobble shall be $0.5 \times \frac{L}{30}$ (mm) max. (for one side)<br>( When moment of 50 mN·m is applied. )<br>● L= Distance between mounting surface and measuring point</td><td>● Shaft bend and shaft wobble shall be $0.7 \times \frac{L}{30}$ (mm) max. (for one side)<br>( When moment of 50 mN·m is applied. )<br>● L= Distance between mounting surface and measuring point</td></tr>
<tr><td>Shaft Pull/Push Strength</td><td>Push strength 100 N min. | Pull strength 100 N min.</td><td>Push strength 100 N min. | Pull strength 100 N min.</td><td>Push strength 100 N min. | Pull strength 100 N min.</td></tr>
<tr><td>Nut Tightening Torque</td><td>—</td><td>1 N·m max.</td><td>—</td></tr>
<tr><td rowspan="7">Electrical Specifications</td><td>Nominal Total Resistance</td><td colspan="3">1 kΩ to 1 MΩ, 300 kΩ to 2 MΩ for taper B (Tolerance ±20 %)</td></tr>
<tr><td>Taper</td><td colspan="3">A, B, C, D, G</td></tr>
<tr><td>Power Rating</td><td colspan="3">0.05 W (0 °C to 50 °C)<br>For potentiometers operating in ambient temperatures above 50 °C, Rating should be derated in accordance with the figure on the right.<br>  <br></td></tr>
<tr><td>Residual Resistance</td><td colspan="3"><table>
<tr><td rowspan="3">Standard</td><td>R < 50 kΩ</td><td>50 Ω max.</td></tr>
<tr><td>50 kΩ < R < 1 MΩ</td><td>100 Ω max.</td></tr>
<tr><td>1 MΩ < R < 2 MΩ</td><td>200 Ω max.</td></tr>
<tr><td rowspan="5">Semi-standard</td><td colspan="2">A, B, D, G T1 & T2 | B, C, G T2 & T3</td><td colspan="2">A, D T2 & T3 | C T1 & T2</td></tr>
<tr><td>R < 2 kΩ</td><td colspan="2">2 Ω max.</td><td colspan="2">20 Ω max.</td></tr>
<tr><td>2 kΩ < R < 50 kΩ</td><td colspan="2">2 Ω max.</td><td colspan="2">25 Ω max.</td></tr>
<tr><td>50 kΩ < R < 250 kΩ</td><td colspan="2">25 Ω max.</td><td colspan="2">50 Ω max.</td></tr>
<tr><td>R > 250 kΩ</td><td colspan="2">100 Ω max.</td><td colspan="2">100 Ω max.</td></tr>
</table></td></tr>
<tr><td>Insulation Resistance</td><td colspan="3">50 MΩ min. at 250 Vdc</td></tr>
<tr><td>Dielectric Withstand Voltage</td><td colspan="3">250 Vac for 1 minute</td></tr>
<tr><td>Noise Level</td><td colspan="3">100 mV max.<br>Apply 20 V (When Voltage Rating < 20 V, use the rated voltage.)<br>Rotate shaft at 30 r/min.</td></tr>
<tr><td>Endurance</td><td>Operating Life</td><td colspan="3">10000 cycles min.</td></tr>
<tr><td colspan="2">Minimum Quantity/Packing Unit</td><td colspan="3">EVUE/EVUF : 200 pcs. Polyethylene Bag (Bulk)</td></tr>
<tr><td colspan="2">Quantity/Carton</td><td colspan="3">EVUE/EVUF : 2000 pcs.</td></tr>
</table>

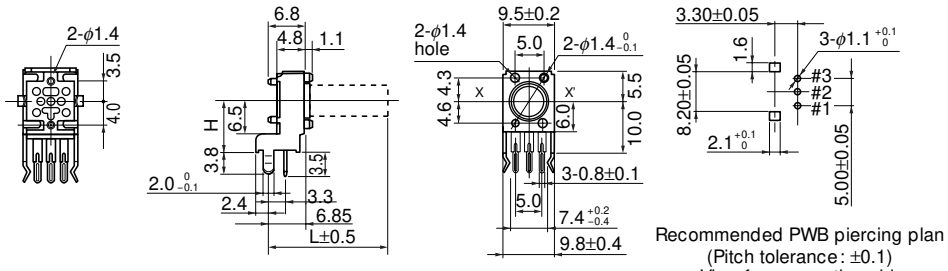
■ Dimensions in mm (not to scale)

● Single Type without Bushing
Horizontal, Snap-in

without midpoint detent: EVUE20, EVUE2A, EVUE21
with midpoint detent: EVUE30, EVUE3A, EVUE31

No. 1

Japan
Malaysia

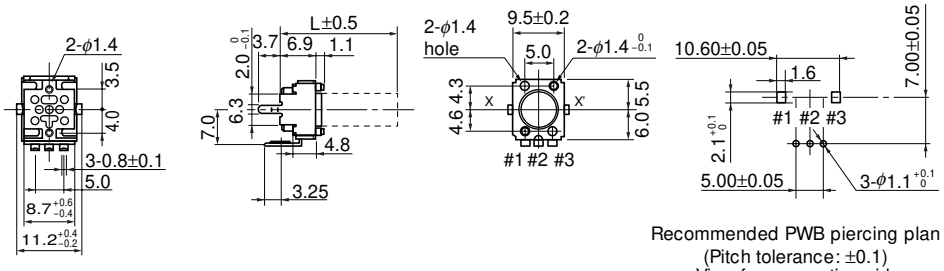



Recommended PWB piercing plan
(Pitch tolerance: ±0.1)
View from mounting side

without midpoint detent: EVUF2A
Vertical, Snap-in
with midpoint detent: EVUF3A

No. 2

Japan
Malaysia



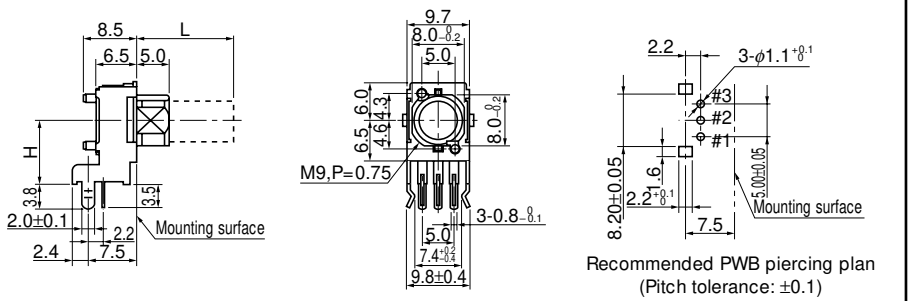

Recommended PWB piercing plan
(Pitch tolerance: ±0.1)
View from mounting side

● Single Type with Bushing
Horizontal, Snap-in

without midpoint detent: EVUE25, EVUE2J
with midpoint detent: EVUE35, EVUE3J

No. 3

Japan

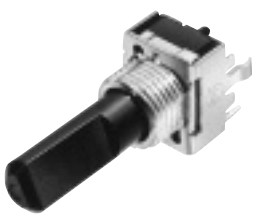


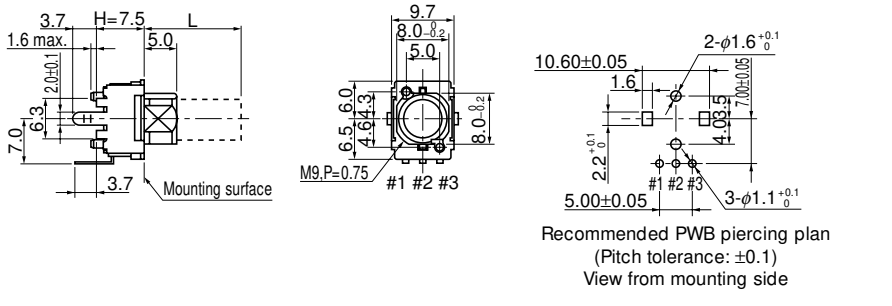

Recommended PWB piercing plan
(Pitch tolerance: ±0.1)
View from mounting side

without midpoint detent: EVUF2J
Vertical, Snap-in
with midpoint detent: EVUF3J

No. 4

Japan



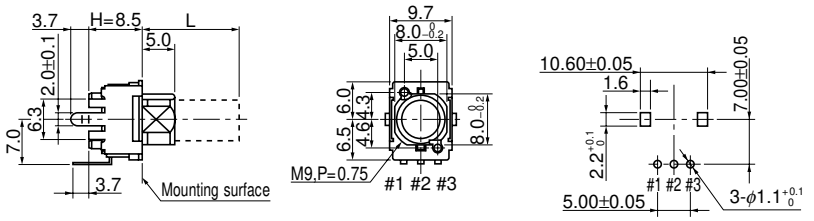



Recommended PWB piercing plan
(Pitch tolerance: ±0.1)
View from mounting side

without midpoint detent: EVUF2M
Vertical, Snap-in ····· with midpoint detent: EVUF3M

No. 5

Japan



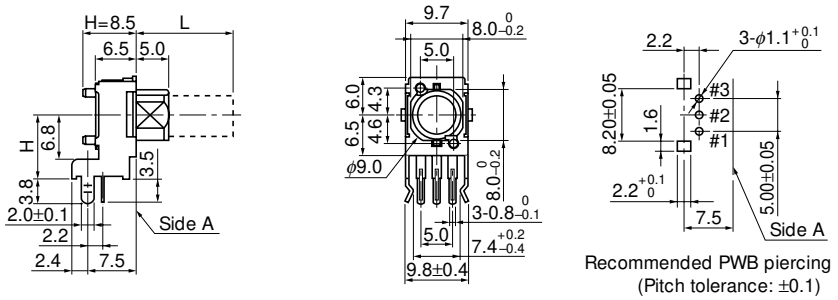

Recommended PWB piercing plan
(Pitch tolerance: ±0.1)
View from mounting side

● Single Type with Sleeve
Horizontal, Snap-in, Mounting Height H=10.0 mm

without midpoint detent: EVUE27, EVUE2K
····· with midpoint detent: EVUE37, EVUE3K

No. 6

Japan

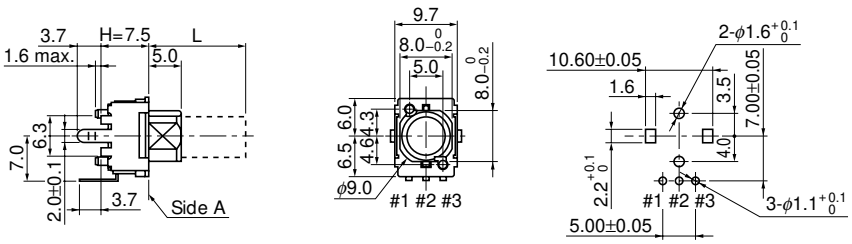



Recommended PWB piercing plan
(Pitch tolerance: ±0.1)
View from mounting side

without midpoint detent: EVUF2K
Vertical, Snap-in ····· with midpoint detent: EVUF3K

No. 7

Japan

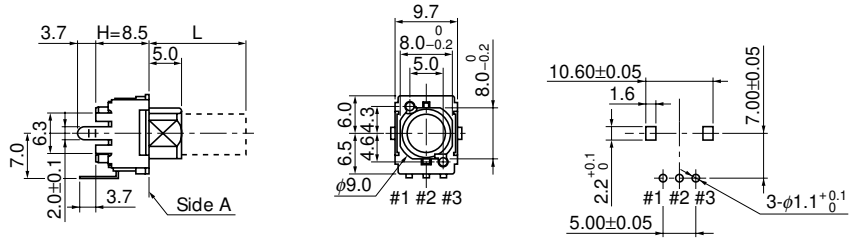



Recommended PWB piercing plan
(Pitch tolerance: ±0.1)
View from mounting side

without midpoint detent: EVUF2L
Vertical, Snap-in ····· with midpoint detent: EVUF3L

No. 8

Japan

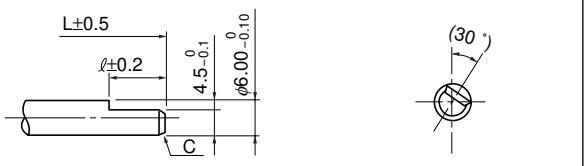



Recommended PWB piercing plan
(Pitch tolerance: ±0.1)
View from mounting side

● Shaft Trims and Dimensions in mm for Type without Bushing (Drawings are at full CCW position.)

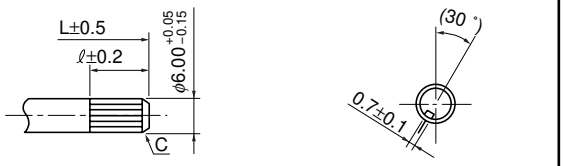
Type F (Flat)

| Product No. 7·8·9 th | F15 | F20 | F25 | F30 |
|---|---|---|---|---|
| L | 15.0 | 20.0 | 25.0 | 30.0 |
| ℓ | 6.0 | 7.0 | 12.0 | 12.0 |



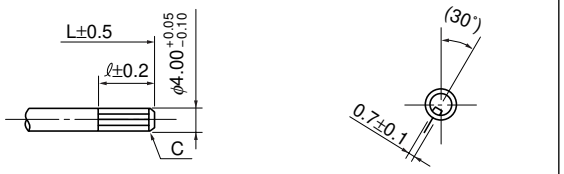

Type E (40 teeth serrations)

| Product No. 7·8·9 th | E15 | E17 | E20 | E25 | E30 | E35 |
|---|---|---|---|---|---|---|
| L | 15.0 | (17.0) | 20.0 | 25.0 | 30.0 | 35.0 |
| ℓ | 6.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |



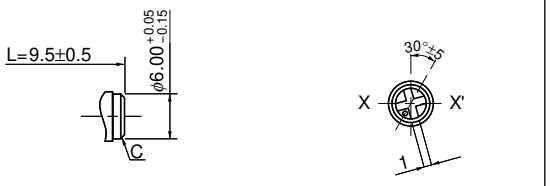

Type M (24 teeth serrations)

| Product No. 7·8·9 th | M20 | M25 | M30 | M35 |
|---|---|---|---|---|
| L | 20.0 | 25.0 | 30.0 | 35.0 |
| ℓ | 7.0 | 7.0 | 7.0 | 7.0 |



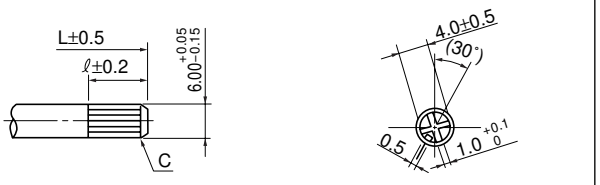

Type S (with screw slot)

| Product No. 7·8·9 th | S01 |
|---|---|
| L | 9.5 |
| ℓ | — |




Type H (40 teeth serrations, with screw slot)

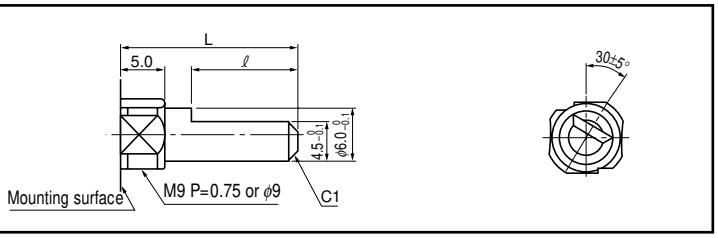
| Product No. 7·8·9 th | H15 | H20 | H25 |
|---|---|---|---|
| L | 15.0 | 20.0 | 25.0 |
| ℓ | 6.0 | 7.0 | 7.0 |




● Shaft Trims and Dimensions in mm for Types with Bushing or Sleeve (Drawings are at full CCW position.)

Type F (Flat)

| Product No. 7·8·9 th | FK1 | FK3 | FK4 | FK5 | FL3 | FK6 |
|---|---|---|---|---|---|---|
| L | 12.5 | 15.0 | 17.5 | 20.0 | 21.5 | 22.5 |
| ℓ | 7.0 | 7.0 | 12.0 | 12.0 | 12.0 | 12.0 |




Note: When you have special requirements other than the above, consult our salesmen.