

### Compact Thumb-wheel Driving Rotary Potentiometers

Japan

Type: **EVLHFA**



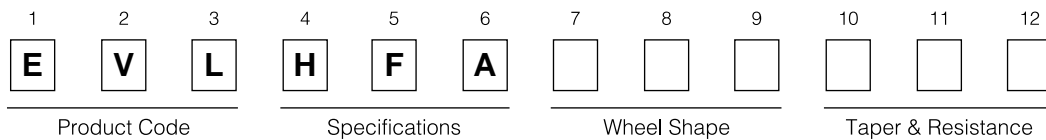
#### ■ Features

- Dustproof molded structure
- Compact and high reliability
- Wave-soldering available
- Custom-designed thumb wheels available

#### ■ Recommended Applications

- Radios, Headphone Cassette Tape Players, Micro-cassette Tape Recorders
- LCD screen TVs, VCRs
- Contrast control for Word Processors

#### ■ Explanation of Part Numbers




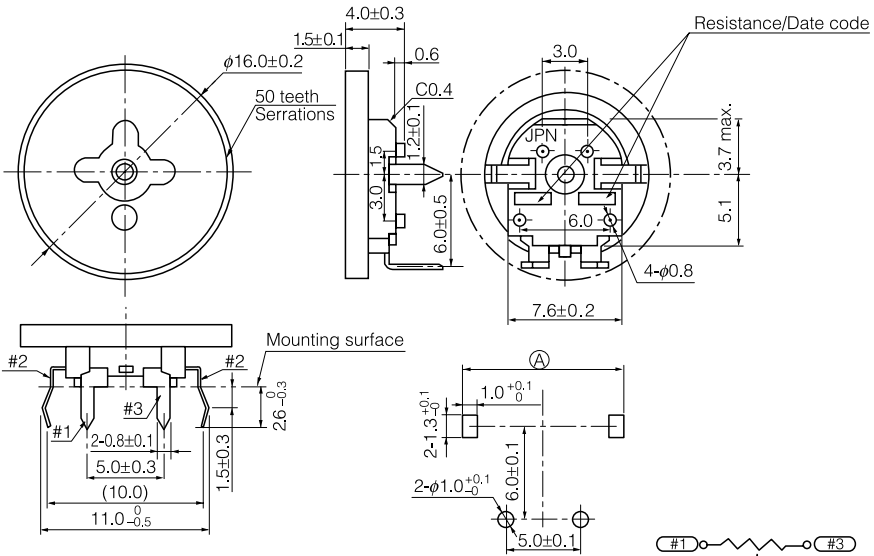
#### ■ Dimensions in mm (not to scale)

- 7 mm Dia. Single Pre-coupled wheel ..... EVLHFA

<p><b>No. 1</b></p> <p>Japan</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th>Wheel color</th> <th>Part No.</th> <th>Midpoint Detent</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>EVLHFAA01</td> <td>—</td> </tr> <tr> <td>White</td> <td>EVLHFAA02</td> <td>—</td> </tr> <tr> <td>Gray</td> <td>EVLHFAA03</td> <td>—</td> </tr> <tr> <td>Black</td> <td>EVLHFKA01</td> <td>with</td> </tr> <tr> <td>White</td> <td>EVLHFKA02</td> <td>with</td> </tr> <tr> <td>Gray</td> <td>EVLHFKA03</td> <td>with</td> </tr> </tbody> </table> <p style="text-align: center; margin-top: 10px;">Wheel dia. 12.8 mm</p>	Wheel color	Part No.	Midpoint Detent	Black	EVLHFAA01	—	White	EVLHFAA02	—	Gray	EVLHFAA03	—	Black	EVLHFKA01	with	White	EVLHFKA02	with	Gray	EVLHFKA03	with	<p style="text-align: center; margin-top: 10px;">Recommended PWB piercing plan View from mounting side</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th>PWB thickness</th> <th>(A)</th> </tr> </thead> <tbody> <tr> <td>1.2±0.1</td> <td>10.3±0.1</td> </tr> <tr> <td>1.0±0.1</td> <td>10.2<sup>0</sup><sub>-0.1</sub></td> </tr> </tbody> </table>	PWB thickness	(A)	1.2±0.1	10.3±0.1	1.0±0.1	10.2 <sup>0</sup> <sub>-0.1</sub>
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Pre-coupled wheel ..... EVLHFA

**No. 3**  
Japan

Wheel color	Part No.	Midpoint Detent
Black	EVLHFAA05	—
Black	EVLHFKA05	with


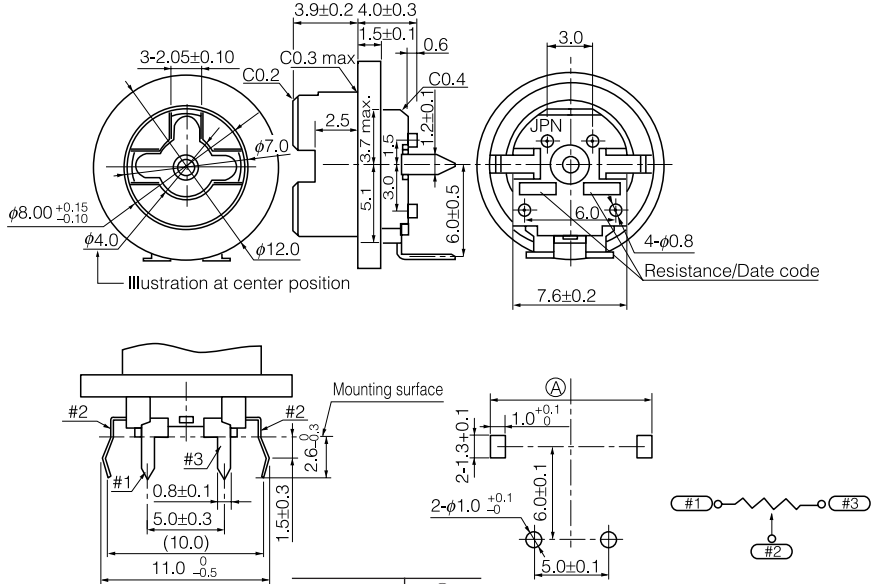
Wheel dia. 16.0 mm

PWB thickness	(A)
1.2±0.1	10.3±0.1
1.0±0.1	10.2 $^{+0.1}_{-0.1}$

Recommended PWB piercing plan  
View from mounting side

Post-coupled wheel ..... EVLHFA

**No. 4**  
Japan

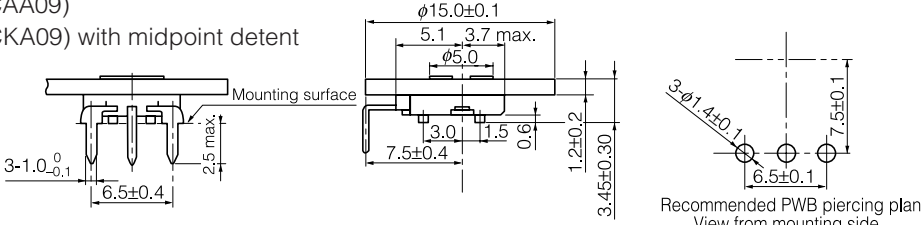



Wheel color	Part No.	Midpoint Detent
Black	EVLHFAA08	—
Black	EVLHFKA08	with

PWB thickness	(A)
1.2±0.1	10.3±0.1
1.0±0.1	10.2 $^{+0.1}_{-0.1}$

Recommended PWB piercing plan  
View from mounting side

**No. 5**  
In-line terminal type is also available.  
(EVLHCAA09)  
(EVLHCKA09) with midpoint detent



Recommended PWB piercing plan  
View from mounting side

### Major Specifications

Item	Type	EVLHFA
Total Rotation Angle		260 °±10 °
Shaft Stopper Strength		60 mN·m min.
Rotation Torque		0.5 mN·m to 6 mN·m
Detent		Center detent available
Detent Torque		0.5 mN·m to 6 mN·m over the measured torque
Wheel Wobble		±0.3 mm max.
Nominal Total Resistance		1 kΩ to 250 kΩ 1 kΩ to 500 kΩ for B
Tolerance		±20 %
Taper		A, B, C, D
Power Rating	B	0.03 W
	Others	0.01 W
Maximum Applicable Voltage		50 Vac/20 Vdc
Noise Level		under 100 mV (RIC noise tester)
Residual Resistance		See the table below
Tracking		—
Rotation Life		10000 cycles min.
Soldering Heat		260 °C 3s max.
Minimum Quantity/Packing Unit		100 pcs. (Vinyl Bag)
Quantity/Carton		4000 pcs.

### Taper

EIAJ	Panasonic	Measuring method	EVLHFA	
			$\frac{\text{Voltage between T1 \& T2}}{\text{Voltage between T1 \& T3}} \times 100 (\%)$	At 50 % of effective rotation
15A	A		10 to 25	
1B	B		40 to 60	
15C	C		10 to 25*	
10A	D		6 to 15	

\*Angle from terminal 3 side.

$$\left( \frac{\text{Voltage between T2 \& T3}}{\text{Voltage between T1 \& T3}} \times 100 \right)$$

### Residual Resistance

EVLHFA		
	T1 & T2 (A, B, D) T2 & T3 (B, C)	T2 & T3 (A, D) T1 & T2 (C)
R ≤ 50 kΩ	2 Ω	25 Ω
50 kΩ < R ≤ 250 kΩ	25 Ω	50 Ω
250 kΩ < R ≤ 500 kΩ	100 Ω	100 Ω

Notes:

1. R=Nominal total resistance value
2. Residual resistance between T1 & T2, at full counterclockwise end.
3. Residual resistance between T2 & T3, at full clockwise end.

Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use. Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.