

Compact Thumb-wheel Driving Rotary Potentiometers

Japan

Type: **EVLHFA**



■ Features

- Dustproof molded structure
- 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 LCDs

■ Explanation of Part Numbers

| | | | | | | | | | | | |
|--------------|----------|----------|----------------|----------|----------|-------------|---|---|--------------------|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| E | V | L | H | F | A | | | | | | |
| Product Code | | | Specifications | | | Wheel Shape | | | Taper & Resistance | | |

■ Specifications


| | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|------------------------------|--|----------------------------------|------------------------------|--|------|-----------|-----------|-----|------|--------------------|------|------|--------------------|-------|-------|-----------|-----|---|---------|
| Mechanical | Rotation Angle | 260 ° | | | | | | | | | | | | | | | | | | | | |
| | Rotation Torque | 0.5 mN·m to 6 mN·m | | | | | | | | | | | | | | | | | | | | |
| | Shaft Stopper Strength | 60 mN·m min. | | | | | | | | | | | | | | | | | | | | |
| | Detent | Center detent available | | | | | | | | | | | | | | | | | | | | |
| Electrical | Nominal Total Resistance | 1 kΩ to 250 kΩ (Tolerance ±30 %) 1 kΩ to 500 kΩ (B) (Tolerance ±30 %) | | | | | | | | | | | | | | | | | | | | |
| | Taper | <table><tr><td colspan="2"><div>Measuring method</div></td><td><div>Voltage between T1 & T2 Voltage between T1 & T3 ×100(%) At 50 % of effective rotation</div></td></tr><tr><td>EIAJ</td><td>Panasonic</td><td>EVLHFA</td></tr><tr><td>15A</td><td>A</td><td>10 to 25</td></tr><tr><td>1B</td><td>B</td><td>40 to 60</td></tr><tr><td>15C</td><td>C</td><td>10 to 25*</td></tr><tr><td>10A</td><td>D</td><td>6 to 15</td></tr></table> | | | <div>Measuring method</div> | | <div>Voltage between T1 & T2 Voltage between T1 & T3 ×100(%) At 50 % of effective rotation</div> | EIAJ | Panasonic | EVLHFA | 15A | A | 10 to 25 | 1B | B | 40 to 60 | 15C | C | 10 to 25* | 10A | D | 6 to 15 |
| | | <div>Measuring method</div> | | <div>Voltage between T1 & T2 Voltage between T1 & T3 ×100(%) At 50 % of effective rotation</div> | | | | | | | | | | | | | | | | | | |
| | | EIAJ | Panasonic | EVLHFA | | | | | | | | | | | | | | | | | | |
| | | 15A | A | 10 to 25 | | | | | | | | | | | | | | | | | | |
| | | 1B | B | 40 to 60 | | | | | | | | | | | | | | | | | | |
| | | 15C | C | 10 to 25* | | | | | | | | | | | | | | | | | | |
| 10A | D | 6 to 15 | | | | | | | | | | | | | | | | | | | | |
| <div>*Angle from terminal 3 side. <div><div>Voltage between T2 & T3</div><div>Voltage between T1 & T3 ×100 (%)</div></div></div> | | | | | | | | | | | | | | | | | | | | | | |
| Power Rating | 0.03 W (Taper B), 0.01 W (Others) | | | | | | | | | | | | | | | | | | | | | |
| Residual Resistance | <table><tr><td><div>Taper & Terminal</div></td><td>A·B·D : T1 & T2 B·C : T2 & T3</td><td>A·D : T2 & T3 C : T1 & T2</td></tr><tr><td>R=Nominal Total Resistance</td><td></td><td></td></tr><tr><td>R < 50 kΩ</td><td>2 Ω</td><td>25 Ω</td></tr><tr><td>50 kΩ < R < 250 kΩ</td><td>25 Ω</td><td>50 Ω</td></tr><tr><td>250 kΩ < R <500 kΩ</td><td>100 Ω</td><td>100 Ω</td></tr></table> | | | <div>Taper & Terminal</div> | A·B·D : T1 & T2 B·C : T2 & T3 | A·D : T2 & T3 C : T1 & T2 | R=Nominal Total Resistance | | | 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 | | | | |
| | <div>Taper & Terminal</div> | A·B·D : T1 & T2 B·C : T2 & T3 | A·D : T2 & T3 C : T1 & T2 | | | | | | | | | | | | | | | | | | | |
| | R=Nominal Total Resistance | | | | | | | | | | | | | | | | | | | | | |
| | 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 | | | | | | | | | | | | | | | | | | | | |
| | Noise Level | 100 mV max. | | | | | | | | | | | | | | | | | | | | |
| Endurance | Operating Life | 10000 cycles min. | | | | | | | | | | | | | | | | | | | | |
| Minimum Quantity/Packing Unit | | 100 pcs. Polyethylene Bag (Bulk) | | | | | | | | | | | | | | | | | | | | |
| Quantity/Cartron | | 4000 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.

■ Dimensions in mm (not to scale)

● 7 mm Dia. Single

Pre-coupled wheel EVLHFA

| No. 1 | | |
|---|-----------|-----------------|
|  | | |
| Wheel color | Part No. | Midpoint Detent |
| Black | EVLHFAA01 | — |
| White | EVLHFAA02 | — |
| Gray | EVLHFAA03 | — |
| Black | EVLHFKA01 | with |
| White | EVLHFKA02 | with |
| Gray | EVLHFKA03 | with |
| Wheel dia. $\phi 12.8$ mm | | |

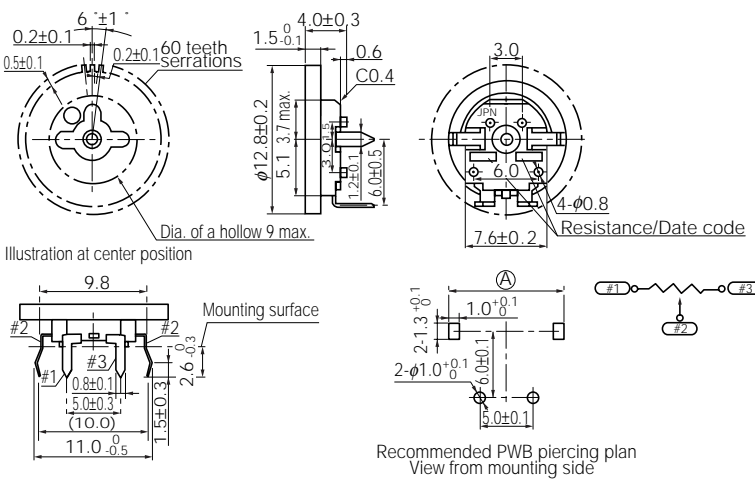



Illustration at center position

Mounting surface

Recommended PWB piercing plan
View from mounting side

| PWB thickness | (A) |
|---------------|---------------------|
| 1.2±0.1 | 10.3±0.1 |
| 1.0±0.1 | 10.2 $^{+0}_{-0.1}$ |

| No. 2 | | |
|---|-----------|-----------------|
|  | | |
| Wheel color | Part No. | Midpoint Detent |
| Black | EVLHFAA06 | — |
| Black | EVLHFKA06 | with |
| Wheel dia. $\phi 13.0$ mm | | |

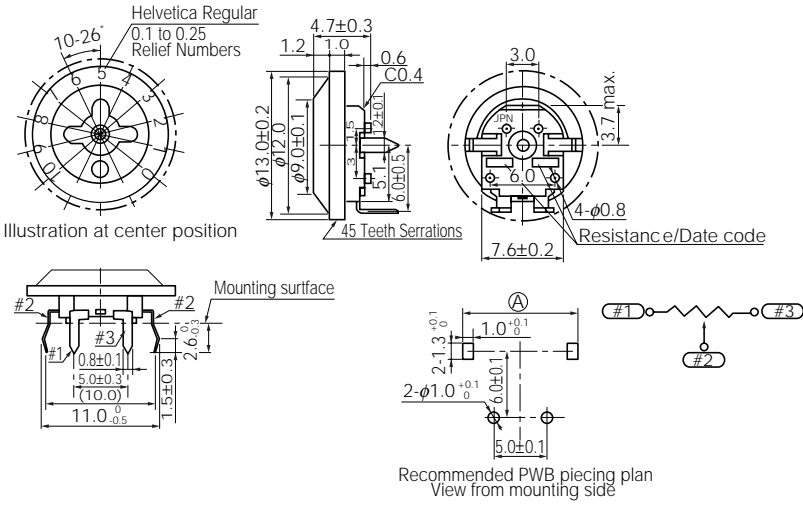


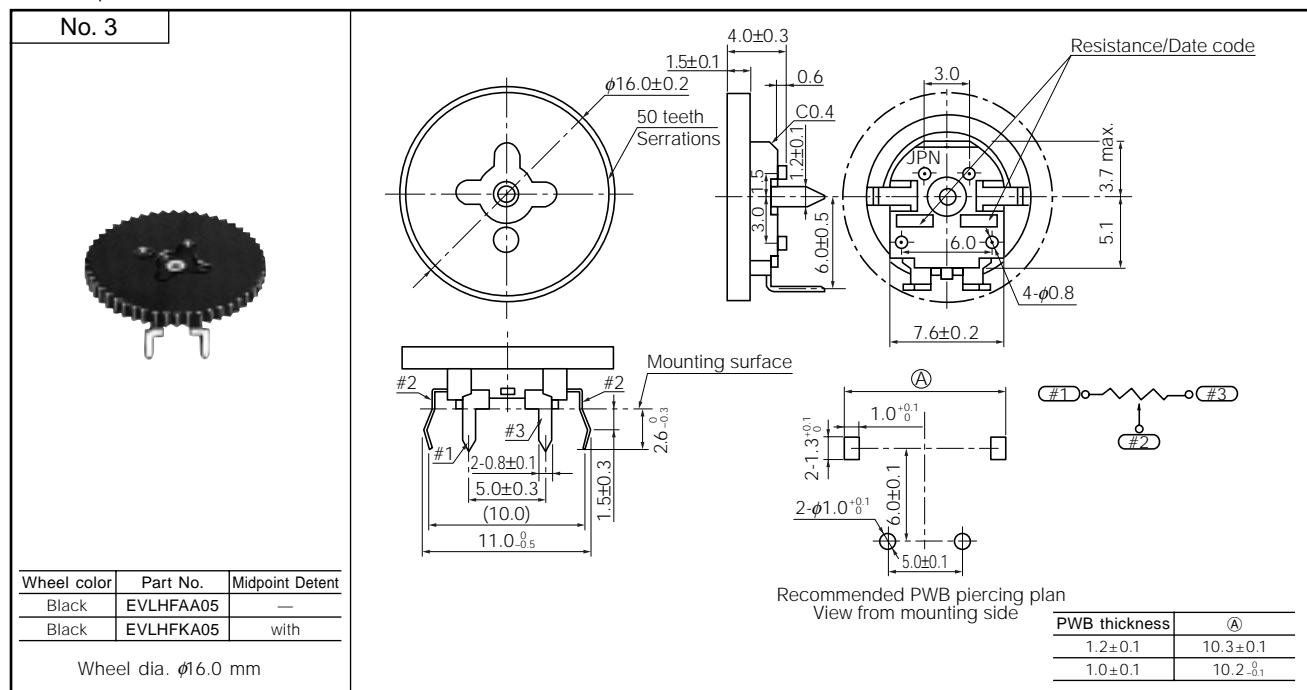
Illustration at center position

Mounting surface

Recommended PWB piecing plan
View from mounting side

| PWB thickness | (A) |
|---------------|---------------------|
| 1.2±0.1 | 10.3±0.1 |
| 1.0±0.1 | 10.2 $^{+0}_{-0.1}$ |

Pre-coupled wheelEVLHFA



Post-coupled wheelEVLHFA

